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ABSTRACT

Phase III of the Study of the Need for Educational Manpower for Handicapped Children and Youth, in demonstrating the feasibility of the Manpower Requirements Projection Model (MRPM), gathered data in the states necessary for implementation of the model. The MRPM was developed to enable state or local administrators of special education to estimate manpower needs and handicapped child population. The 50 state special education agencies were surveyed concerning the flow and utilization of special education information and their capability to utilize the model. It was found that few states had special education information systems capable of providing predictive as well as evaluative data, and in few states did data on handicapped children include all sources of education. It was concluded that, despite some obstacles to automating special education data processing, almost all states had the capability to utilize the MRPM and it could be operational in two to three annual data cycles in most cases; availability of information flow capable of providing required input was a major factor affecting implementation. Appended are extensive state data summaries (personnel data and special education enrollment) and information flow implementation and maintenance cost estimates for each state. (EC 032 847 and ED 032 849-EC 032 852 contain related information.) (KW)

# ORI

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OPERATIONS RESEARCH, Inc.
SILVER SPRING, MARYLAND

# STUDY OF THE NEED FOR EDUCATIONAL MANPOWER FOR HANDICAPPED CHILDREN AND YOUTH—PHASE III REPORT

## PART A—PHASE III FINAL REPORT

1 May 1970

Prepared under Contract No. OEC 0-9-08928-0710
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# PREFACE

The "Study of the Need for Educational Manpower for Handicapped Children and Youth—Phase III Report" has been organized so that appropriate parts of it may be conveniently distributed to those most immediately concerned with the content of each part. The general content of each part is as follows:

- Part A, Phase III Final Report, contains the overall report on the Manpower Requirements Projection Model (MRPM) validation efforts and the activities, findings, and conclusions of the state survey. Its appendices also contain implementation cost estimates and summaries of the enrollment and employment data collected during the state survey.
- Part B, Special Education Staff Users' Guide, contains both the general and the detailed guidance necessary for non-technical oriented personnel for understanding and implementation of the MRPM.
- Part C, Manpower Requirements Projection Model—Technical Documentation of the Computer Program, which is written for the technically oriented user of the MRPM, provides the technical details necessary for understanding the model formulations and computer programs.
- Part D, State Analysis Reports, includes individual reports on each state's special education information flow.

Parts B and C are bound together in one volume; Part D is divided into three volumes for ease in handling.

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The project team for Operations Research, Inc., included:

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C. M. Koch, Project Manager, who was responsible for the day-to-day direction of the project team, and who participated in the state survey analysis and co-author of the Phase III Report;

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## SUMMARY

### BACKGROUND

Under the auspices of the U.S. Department of Health, Education, and Welfare, Office of Education, Bureau of Education for the Handicapped, a three-phase study was initiated by Operations Research, Inc. (ORI), to develop an operational model that would permit organized consideration of the factors affecting the requirements for special education manpower, make a projection of these requirements, and, through a comparison with the supply potential, determine the manpower gap. This information could then be used as a basis for establishing programs to relieve the special education manpower shortage. The model would be made available to each of the states for voluntary application.

In Phase I of this study, the tentative model for estimating manpower requirements was formulated. Phase II objectives included the definition of operational methods, based on a pilot survey of data availability, and the definition of data objectives and collection strategies to be used in the 50-state survey.1/

Analysis of the results of the five-state pilot survey performed in Phase II indicated that few of the data elements required by the Manpower Requirements Projection Model (MRPM) were available at the state level in the necessary level of detail; that many of the required data elements were available at the local level but were not being transmitted to the state level; and, finally,

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1/ Detailed descriptions of the work performed in Phases I and II are provided in ORI Technical Report 593, Study of the Need for Educational Manpower for Handicapped Children and Youth-Phase I Report, 13 December 1968, and ORI Technical Memorandum 126-69, Study of the Need for Educational Manpower for Handicapped Children and Youth-Phase II Report, 4 June 1969.

that in some states many of the required data elements, although presently unavailable, could be developed.

As a result of the unavailability of satisfactory sets of data, it was not possible to conduct a practical model test utilizing state-level data. It also became apparent that the objectives of Phase III would have to include not only the collection of handicapped child population and special education employment data currently available in each state but also an assessment of the capabilities of the individual states to utilize the model. This assessment would include an analysis of existing information flow processes to provide the necessary model input data, a review of the capability of existing automatic data processing equipment for processing the needed information and running the model itself, and an assessment of the state's special education staff's capability to utilize the model.

Furthermore, it was determined that Phase III would provide BEH with guidance regarding the resource requirements for the development of an information system, at the state level, capable of supporting model requirements. It was apparent that model feasibility testing would have to be conducted on a local level, where data not already available could be extracted from records with a minimum of difficulty.

Thus, from the Phase I development of tentative models and the Phase II exposure to the practicalities of application, the objectives and activities necessary for Phase III were evolved.

This summary contains an overview of the results of the activities undertaken in Phase III to accomplish the stated objectives. It includes a brief review of the model validation procedure, a discussion of the major survey concerning the flow and utilization of special education information, and a review of the general conclusions that were reached as a result of the analysis of the survey findings.

## MODEL DEMONSTRATION AND VALIDATION

When it became apparent that the data necessary to demonstrate the model would not be available at the state level, it was decided to simulate a state condition by substituting a special school district having a large handicapped child population, a variety of special education programs, and at least 4 or 5 years of historical records. The test procedure used to determine the validity of the projections involved the collection of the required data elements from the historic files, input of the data into the model, operation of the model to provide manpower projections, and comparison of these computed projections with the actual employment records.

The model demonstration proved that collection of the data required by the model is feasible and that, when the necessary data is provided as input, the computer programs are operational. The mathematical relationships established within the model were also proven to be valid.

## SURVEY FINDINGS

In surveying the 50-state special education agencies, a great variety was found in those administrative facets of handicapped child education that affect the flow and utilization of special education information. The major variables that were found to affect the model application potential are outlined briefly below:

- Distribution of responsibility for the education of handicapped children
- Organization of state special education agencies
- Level of data currently available at state special education agencies
- Need for additional special education data
- Attitude toward model application
- Legislative, geographic, and fiscal factors
- Existing information flow characteristics
- Availability of data elements needed for MRPM application
- Availability of data processing resources.

Each state has its own special education "personality," made up of variations in the foregoing characteristics. The findings and recommendations as they specifically concern each state are presented in detail in the State Analysis Reports contained in Part D of this Phase III Report. The broad scope of these variables as they affect the considerations of this study are briefly discussed in the subsequent paragraphs.

### Distribution of Responsibility for the Education of Handicapped Children

Responsibility within the state for the education of handicapped children almost never rests with one state agency alone; other state agencies besides the education departments have a portion of the responsibility. The reasons for the dispersion of responsibility include jurisdictional assignments resulting from services being provided by multiple sources, functional assignments established by the organization of state services, specialization of services in state institutions, and the services of private facilities. Each additional agency, autonomous institution, and private facility adds to the complexity of the information flow by requiring additional coordination and adding to the number of sources from which data must be collected.

## Organization of State Special Education Agencies

The state special education agency (or its equivalent) will be the focal point of the special education information system and the prime mover in the implementation of the MRPM. Therefore, its function in the state educational hierarchy, its strengths, and its weaknesses will have important bearing on the potential for MRPM use.

The functions of special education agencies vary widely from state to state. The range of legislated responsibilities runs from practically no responsibility to rather complete control of the state's education effort for handicapped children. Agencies may—

a. Oversee distribution of funds, exercising only enough control to obtain information upon which to base fund disbursements

b. Provide guidance to local education agencies for the formulation and development of special education programs

c. Enforce state special education regulations pertaining to diagnosis, establishment of classes, approval of curricular content, teacher approval, and individual child applicant approval.

The organizational level of the special education agency within the state department of education varies considerably. In some states, the director of special education is directly responsible to the superintendent of education (or his equivalent) and in other states he may be several levels removed. The ability to influence information flow from local school districts and other concerned agencies is frequently affected by the special education agency's organizational position.

The special education intra-agency organizations also exhibit a variety of structures that can affect model application. In some states, communications and information flow within the agency are excellent, but there are also complex agencies where coordination between staff members is minimal or nonexistent.

## Level of Data Available at State Special Education Agencies

The effects of the type of organization and functions of a state special education agency frequently have a direct bearing on the information flow and consequently on the type of data to which the agency has access. The following examples summarize the different levels of data found to exist at various state special education agencies:

- Sufficient to support financial disbursement only
- Sufficient only to satisfy the requirements to qualify for Federal assistance

- Sufficient to satisfy the specific needs of only a portion of the special education programs
- Sufficient for a specific purpose, possibly to reinforce some request of the legislature
- Sufficient to provide statistics for annual reports.

It was found in many states, however, that although the current level of data detail at the state level could not support the model, only minor modifications to an already existing information flow would be required to provide data sufficient for initial model implementation.

### Need for Additional Special Education Data

Many of the state special education directors were very much aware of the inadequacy of the information available to them. In general, they need additional data to document services provided, to analyze the status and effectiveness of their present programs, and to plan for both the near-future level of activity and programs requiring a long range development. The directors recognized that the implementation of the MRPM would provide them not only with a manpower projection capability but also with many of the data elements they require to satisfy their other management needs. As a result, the requirement for data collection for model application purposes could provide the impetus to initiate improved data collection procedures in many states.

### Attitude Toward Model Application

In most cases the state special education agency directors felt that the basic data elements required for model implementation would be useful for operational analysis; however, there was not universal agreement that all the data elements were always applicable. Where the full concept of the model potential was well understood, a definite interest in utilization of the model was exhibited.

### Legislative, Geographic, and Fiscal Factors

It has already been mentioned that each state has its own characteristics that make it at least a little different from its sister states. This uniqueness becomes quite evident in the area of handicapped child education in the varying definitions of handicapping conditions, the difference in the number of handicapped areas served, the changes in fiscal attitudes toward special education, the variety of enabling legislation, the differences in state and local sponsorship of special education, the problems of population density/dispersion, and the availability of special education manpower. The MRPM has the flexibility to incorporate these unique characteristics in its application, but the state's special education information flow must also be capable of considering the influence of those factors.

Existing Information Flow Characteristics

Every state has some type of information flow from which the special education staff can extract data pertinent to its function. However, the characteristics of the existing flow certainly affect the content, utility, and efficiency of the information system. Among the elements to be considered and influenced by special education if it wants improved information flow are:

- The purpose of the system, i.e., to serve central education or special education
- The basic information flow patterns, i.e., flow from local education agency to state special education agency
- The variety of forms in use and their adaptability for conversion of data for automated processing
- The degree of automation
- Reporting time period variations.

The incorporation of data elements into existing systems at the state level was often not the result of a preconceived information system design, but rather the result of building on information already available, or the cumulative result of special information requirements. Frequently, information systems were designed to incorporate existing characteristics rather than modify the conditions to improve the flow.

Availability of MRPM Data Elements

The full utilization of the Manpower Requirements Projection Model requires that certain data elements be available for input to the Model program. Often, data elements required are at a level of detail below that which is currently available at the state special education agency. However, the model is designed to provide a framework for the systematic consideration of all of the factors which may affect special education manpower requirements. In this respect, it is more sophisticated than other projection techniques and will provide more accurate projection results. The orderly and logical consideration of all those factors therefore requires a more detailed level of input, which is frequently useful for many other management applications also.

The following paragraphs briefly discuss the required data elements and the condition of their availability as found in the state special education agencies during the state survey visits.

Children Identified as Needing Special Education. The enrolled children are almost always accounted for, in one way or another, at the state level. However, to be usable by the MRPM, enrollment data must be broken down by age, handicapping conditions, and by education program. Enrollment data by handicap group was usually available, but further delineation (when it did exist) was generally by education level, e.g., elementary, primary, intermediate, secondary, or high school, and not by individual year of age.

Records pertaining to those children identified and waiting to be enrolled were scarce at state level and, when available, were usually uncompiled and incomplete.

*Unidentified Handicapped Child Population*. In the absence of comprehensive diagnostic capability, most states use prevalence rates to estimate the number of children in each category of each handicapping condition. Although a few states use rates based on special studies, most states use the national prevalence rates or modifications of national rates.

*Mobility of Special Education Population*. The size of the identified handicapped child population in a state is altered by the addition of new children, including new enrollees and incoming interstate transfers, and by attritions (graduations, dropouts, outgoing interstate transfers, death, etc.) that deduct from the total population. The availability of data pertaining to these mobility factors was usually not satisfactory for MRPM purposes.

*Special Education Simulation Variables*. Educational program mix trends form one of the data elements useful in the projection of manpower requirements, because their variation can affect manpower requirements. The state survey indicated that historical records usually contain sufficient data to enable special education consultants or staff to plot an interpretation of trends in program mix.

Other simulative data elements include personnel types and personnel/pupil contact ratios. Personnel types were identifiable, because almost all states required that direct contact personnel have some special qualifications unique to the handicapped area to be served. Personnel/pupil contact ratios for the state's public school system are almost always formally regulated.

*Yearly Projections of General Child Population By Age*. Many states had population projections or statistics that could be utilized in the preparation of annual population projections by single year of age, for the period for which the projections were desired.

*Special Education Personnel Supply*. The basic data was usually found to be available within the state special education office, and, although it was rarely summarized and totaled by area of specialization, it could generally be summarized with a little manual tabulation.

### Availability of Data Processing Resources

The resources necessary for the implementation and application of the Manpower Requirements Projection Model include both manpower skills and data processing hardware capability. The availability and adequacy of both varied widely among the 50 states.

Manpower. Talent with the required capability to implement the information flow necessary to support the MRPM was rarely found within the existing special education staffs, because these skills are not indigenous to normal special education operations. Within almost every state government, however, there is an organization with the necessary types of personnel skills.

Hardware. The capacity required of the available computer hardware falls into two categories: capacity to process an information system, and capacity to process the Manpower Requirements Projection Model. Most state education agencies theoretically have the hardware capability, or access to it through other agencies or universities, to process an information system.

The hardware capability requirements for the model generally exceed those of an information system, primarily because of the need for additional word storage capacity. A large majority of the states already have sufficient computer capability to run the MRPM program.

## SURVEY CONCLUSIONS

During the state visits, the analysts performed those data collection and analytical functions that were necessary to the accomplishment of the project objectives. In each case recommendations for actions necessary to the implementation of the MRPM were prepared; these are provided in the State Analysis Reports, Part D of this Report. The conclusions derived as a result of the survey are summarized, in terms of project objectives, in subsequent paragraphs.

An effort was made to collect from the state special education agencies data that could be used to calculate current special education manpower requirements. Incomplete data collections occurred in many instances, because of the total non-availability of certain data, over-aggregation of data, or partial availability of data. Due to the inconsistent availability of data, the resultant calculations cannot be relied upon for an evaluation of current special education manpower requirements.

This data collection effort was most useful in the analysis of existing special education information flows, because, as the data were obtained, the source and flow were frequently revealed. The conclusions regarding the status of existing special education information flows at state level are summarized as follows:

- Few states have special education information systems that are capable of providing management-type information; i.e., data that has predictive as well as evaluative applicability. The need for additional data is quite evident. A major upgrading of the information flows within almost all states is indicated. To accomplish this objective, changes will have to be made by the states—major in some, and relatively minor in others. The first step in upgrading the information available to special education administrators is to provide the agencies with an understanding of what types of information can be made available, how to obtain it, and how to use it. The recommendations contained in the individual State Analysis Reports should be of further assistance in attaining this understanding.

- In very few of the states is the data pertaining to handicapped children inclusive of all of the sources of handicapped child education—public schools, state schools and institutions, and private facilities. Usually, each agency maintains its own records. Such limited information would defeat the objective of the MRPM to project special education manpower requirements for the state's total handicapped child population.

  It must be stressed that interagency cooperation and communication are absolutely essential to the establishment of a common handicapped child data base that will be representative of the state's total service requirements and responsive to each agency's information needs. Further, in some states, the special education agency's internal coordination and communication must be strengthened. Standardization of forms, data elements, data collection cycles, and timetables is a prerequisite to internal data flow stabilization.

  Liaison between state level and local special education personnel is also essential to the establishment of an information flow. The greater the involvement of the state agency with the local agency, the better the information flow. A corollary benefit to greater involvement is the improved capability of state personnel to analyze and utilize the information collected.

The vast majority of states cannot easily obtain the information they need without benefit of ADP techniques. The manual operations are too time consuming for an already understaffed agency. The state survey analysis included an evaluation of the capability and availability of the existing data processing equipment for use in processing special education data and for MRPM application.

Most of the states have within their government organizations computer hardware capable of performing the required processing for both the information flow and MRPM application, but this capability is frequently not accessible to the special education agency. Although computer availability is a problem in many states, analysis reveals that the relatively limited application of automated data processing (ADP) techniques to the special education information systems is more the result of a combination of other constraints. The lack of appreciation for the potential availability of additional information through the application of ADP, and a limited understanding of how to initiate and apply ADP techniques, are major obstacles to automating special education data processing.

Another objective of the state survey was to evaluate the capability of state special education staffs to utilize MRPM capabilities. From discussions with, and observations of, the state special education staffs, it was concluded that almost all have the capability to utilize the model. However, the data to support the model must be developed, and in this respect some additional understanding is required by the special education community.

The improvement of information flow and data reliability means the acceptance by special education agencies, both at state and local levels, of the fact that each data source and each data element is an integral part of the overall system. Increased data availability need not always require increased work in data collection. Frequently, coordinated and systematic data collection will require no increase in effort over that already being expended but will yield much additional information.

Conclusions about the potential for application of the Manpower Requirements Projection Model are summarized in the following brief statements:

- The model is much needed.
- The concept has been favorably received.
- Some surmountable problems will be encountered in creating the necessary information flow.
- There should be no serious constraints because of computer capacity limitations.
- Once the implementation decision has been made by the state, the MRPM could be operational in two to three annual data cycles in most states.

Acceptance of the model concept and its potential for application is based upon the utility of various aspects of the model. Because the model has several capabilities, it has an appeal for various types of users and thus has a greater potential for application. The advantages of using a model to assist in the development of plans are these:

a. When planners can see the implications of major decisions, they can spot potential problem areas and discover opportunities for remedial or preventative action.

b. By comparing past performance with alternative courses of action, a repetition of past mistakes can be avoided.

c. By applying long-range planning, special education personnel can cast a longer look ahead, with freedom to examine hypothetical solutions before decision time becomes critical.

d. By providing the means for the rapid generation of revised plans, new directions can be quickly derived to meet unforeseen contingencies.

The model concept has been tested and is feasible. However, the major considerations affecting model implementation are the availability of an information flow capable of providing the required input and availability of hardware. Most of the data elements can be incorporated in the existing information flows in all but a few of the states, so that data should be available for implementation of the MRPM in from two to three annual data cycles, once the decision is made by each state to go forward. In most states the required hardware is available, and the small usage time required for model application should not cause much difficulty in obtaining the required computer usage time.

## FURTHER FEDERAL ACTION

Many state agencies need encouragement in the form of incentive and leadership. The MRPM is a form of incentive in that, by providing the state agencies with management tools, it can help them to do their jobs better. The Phase III state visits provided initial leadership in many states by laying the groundwork for improving the information flow and creating a desire for better data. The impetus that has been gained as a result of this effort should be supplemented and supported by continued Federal sponsorship of programs to assist the states with the development of their information systems.

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Appendix 1 Tables: State Data Summaries for Each of the 50 States

Appendix 2 Tables: Cost Estimate for Special Education Data Development and MRPM Application at State Level for Each of the 50 States

# I. INTRODUCTION

## BACKGROUND

1.1 Under the auspices of the U.S. Department of Health, Education, and Welfare, Office of Education, Bureau of Education for the Handicapped, a study was initiated to investigate possible approaches to the development of a methodology that would assist in the determination of future special education manpower requirements. The objectives were to obtain an operational model that would permit organized consideration of the factors affecting the requirements for special education manpower, make a projection of these requirements and, through a comparison with the supply potential, determine the manpower gap. This information could then be used as a basis for establishing programs to relieve the special education manpower shortage. The model would be made available to each of the states for voluntary application.

1.2 In Phase I of this study the working definitions of key variables were developed and tentative models for estimating manpower requirements and supplies were formulated. Phase II objectives included the definition of operational methods based on a pilot survey of data availability, and the definition of data objectives and collection strategies to be used in the 50-state survey.

1.3 Analysis of the results of the five-state pilot survey indicated that few of the data elements were available at the state level in the detail required to fully utilize the Manpower Requirements Projection Model (MRPM) capability; that many of the data elements were available at the local level but were not being transmitted to the state level; and that some of the required data elements were unavailable in some states but could be developed.

1.4 As a result of the unavailability of satisfactory sets of data, it was not possible to conduct a practical test of the model utilizing state-level data. It also became apparent that the emphasis in Phase III would have to be shifted. The initial concept of collecting data for projection purposes had to be changed to not only emphasize the collection of data currently available, but also to include an assessment of the capability of

a. Existing information flow processes to provide the necessary model input data

b. Existing automatic data processing equipment to process the needed information and to run the model program

c. The special education staff to utilize the model.

1.5 It was further concluded that to be fully responsive to a model application feasibility analysis, the study would have to generate recommendations for the development of an information system capable of supporting model requirements.

1.6 In addition, model feasibility testing would have to be conducted on a local level where data not readily available could be extracted from local records with minimum difficulty.

1.7 Thus, from the Phase I development of tentative models and the Phase II exposure to the practicalities of application, the objectives, activities and conclusions contained in this Phase III Report were evolved.

## PURPOSE OF THE REPORT

1.8 The purpose of this report is to present the findings, conclusions, procedures, and data which were developed during the conduct of the Phase III portion of the Study of the Need for Educational Manpower for Handicapped Children and Youth. It includes:

a. The results of the Manpower Requirements Projection Model demonstration and validation test

b. A description of the procedures used in preparing for and conducting the state-by-state survey

c. A summary of state survey findings regarding special education characteristics as they affect the flow of information required for MRPM application and agency administration

d. MRPM application guidance for the non-technically oriented user, and detailed model explanation and system documentation

e. Individual state reports containing an information flow analysis, an evaluation of data element availability and the processing potential, recommendations for the development of MRPM data element requirements, and an assessment of the resources required to implement an information system that will support the model.

## ORGANIZATION OF THE REPORT

1.9 The total report is organized into four specific segments — the Phase III Report proper (Part A) with two appendices, two User's Guides (Parts B and C), and the State Analysis Reports (Part D). Each of these segments is described briefly as follows:

1.10 Part A, the Phase III Final Report, contains in Section II a review of the study objectives and in Section III a discussion of the constraints which established the level of the study, the analytical detail, and the quality and quantity of the data collected. Section IV summarizes the information that was obtained while accomplishing the study objectives and presents the conclusions derived from an analysis of these findings. The objectives, procedures for accomplishment, and results of each of the proposed tasks are discussed in Section V. Section VI suggests further recommended action.

1.11 Supplementing Part A are two appendices:

Appendix 1, State Data Summaries, contains the current special education enrollment and personnel data which was collectable during the survey.

Appendix 2, Information Flow Implementation and Maintenance Cost Estimates, contains, for each state, an estimate of the expenditures necessary to implement and maintain an information flow that would provide the data necessary for model application.

1.12 Part B, Special Education Staff MRPM User's Guide, contains model application guidance for those who would be responsible for the flow and accumulation of data necessary for model application but who do not necessarily desire to review the technical explanations of model mathematics or computer program documentation.

1.13 Part C, Manpower Requirements Projection Model — Technical Documentation of the Computer Program, contains an explanation of the mathematical expressions used in the model as well as the computer program documentation.

1.14 Part D, State Analysis Reports, contains the survey study reports for each of the 50 states.

# II. PHASE III STUDY OBJECTIVES

## INTRODUCTION

2.1 As a result of the findings in the earlier phases of this study, it was determined that the information necessary to utilize the Manpower Requirements Projection Model was, in general, not presently available at the state special education level. Therefore, the potential for successful implementation of the model was greatly dependent upon the flow of basic special education information within each state. In addition, the capabilities and motivation of the special education staff, and the availability of computer hardware would have a bearing on model implementation potential. The recognition of these constraints led to the determination of the objectives and the tasks for Phase III.

## SPECIFIED OBJECTIVES

2.2 The broad objective of Phase III was to lay the groundwork in each state for producing the flow of data necessary for the initial implementation and continued application of the MRPM. The Phase III proposal broke this overall objective into three specified sub-objectives.

2.3 One sub-objective was to specify for each state an information flow and related procedures that would facilitate the continued collection and reporting of data necessary for MRPM utilization.

2.4 A second sub-objective was to identify the extent of assistance each state would require to both implement and maintain the information flow.

2.5 The third sub-objective was to point out to each state the uses and applications of the MRPM so as to motivate each state to collect the data, utilize the model's capabilities, analyze the results, and apply the information in its planning and management.

## ADDITIONAL REQUIREMENTS

2.6 In addition to the foregoing specified sub-objectives, there were two additional major requirements implicit in the task content. First, it was necessary to demonstrate the model application feasibility and information validity, for until this was done, achievement of the other objectives remained academic. Second, it was necessary to collect in each state where available, data which could be used to estimate present special education manpower requirements.

## ACCOMPLISHMENT OF OBJECTIVES

2.7 Each of the objectives and requirements was successfully fulfilled to the degree possible within the limitations imposed by time, funds, and data availability. The results of these accomplishments are presented in Section IV, Findings and Conclusions.

# III. LIMITATIONS

## INTRODUCTION

3.1 During the course of the study certain factors hindered or curtailed accomplishment of some of the study objectives. Certain limitations were inherent in the study plan, which was based on an established time frame and the visit of one survey analyst to each state; others resulted from circumstances to be expected when conducting a study as involved with state organizations, personnel, and varieties of data as was this 50-state survey.

## LIMITATIONS

3.2 The principal limitations encountered while conducting the survey were in

a. The availability of the required type of data at the state level

b. The complexity of state organizational responsibility for the education of handicapped children

c. The availability of state personnel during the time frame of the visit

d. The length of time available to visit each state.

3.3 Limitations in these areas varied in occurrence and in individual and cumulative effect from state to state, depending upon the combination of circumstances existing at the time of the visit.

## Availability of Data at the State Level

3.4 The availability of data at the necessary level of detail within each state agency had a direct effect on the data collection task and an indirect effect on the performance of the other survey duties. Incomplete data collection occurred in some instances because of total non-availability of certain data, over-aggregation of data (for example, total enrollment by handicapping condition but no breakdown by education level or educational program type), or only partial availability of data (e.g., data available from the public school system but not from the state institutions). When these conditions existed, there was frequently no way, within the available time, of obtaining the depth of detail desired.

3.5 An undesirable effect could also occur, however, when extremely detailed data, such as individual classroom records or teacher's reports, were the only source of data available. Frequently the state agency staff was too limited to provide much assistance in the aggregation of the data, and if the analyst spent too much of his limited time aggregating data, he might not be able to pursue the other objectives of his visit. A trade-off might have to be effected at the expense of the collection of data. Any of the foregoing conditions could be the cause of missing or incomplete data, and where the data were incomplete, the current manpower requirements estimates could not be made.

## Complexity of Handicapped Child Education Responsibilities

3.6 The responsibility for the education of handicapped children is rarely confined to the state special education agency. In some states the responsibility is shared by only one or two other state level agencies and the division of responsibility is clearly defined. Even this small amount of subdivision occasionally required the survey analyst to conduct multiple interviews and data collection efforts. However, the most difficulty was encountered when responsibility overlapped and there were a number of agencies involved. Then scheduling interviews, visiting different sites, and orienting each new interviewee could consume much valuable time. Every effort was made to assemble the responsible personnel in one meeting whenever possible; nevertheless, the more complex the handicap child education responsibility in the state, the greater the difficulty in accomplishing all of the survey objectives within the allotted time.

## Availability of State Personnel

3.7 Another important problem arose when state agency personnel, because of their busy schedules, could not be available during the state visit for as much time as was needed. This condition was most critical in states having small staffs, where one staff member might be the sole authority in particular areas of specialization. This is not to be interpreted as a lack of cooperation. In fact, the cooperation exhibited by almost all of the state agency personnel was outstanding.

## Length of Time for the State Visit

3.8 Both because of the time frame for performance of the survey and because of the amount of state personnel time consumed, each state survey visit was limited to 3-5 days. While adequate for most visits, this period was insufficient in a number of cases, for reasons already cited in this section; data elements could not be collected and data reliability could not be verified in the time available.

## CONCLUSION

3.9 Whenever the aforementioned limitations did threaten to affect the accomplishment of some of the study objectives, priority was placed on the accomplishment of those objectives which would contribute most toward the implementation of an information flow that would provide the necessary data for model utilization. Despite the fact that the collection of data to be used for the estimation of current manpower requirements was at times restricted, it is felt that all study objectives were successfully achieved.

## IV. FINDINGS AND CONCLUSIONS

### INTRODUCTION

4.1 This section presents the findings and conclusions resulting from the tasks performed in the accomplishment of Phase III objectives. The work in this phase was divided into two major undertakings: (1) the demonstration and validation of the Manpower Requirements Projection Model, and (2) the state survey to collect data, develop information flow procedures, evaluate staff and hardware capabilities, and encourage model implementation. The degree to which the study was successful in attaining its objectives is discussed in the following paragraphs.

### MODEL DEMONSTRATION AND VALIDATION

4.2 When it became apparent that the data necessary to demonstrate the the model would not be available at the state level, it was decided to simulate a state condition by substituting a large special school district, where all the data elements could be collected and input into the model for purposes of testing and validation.

4.3 The strategy of the test was to collect data from historic files for the required data elements, input them into the model, make manpower projections, and compare them with the actual employment records to determine the validity of the projections. This process utilized historical data records covering a 4-year span. Further details as to the methodology employed in conducting the test are contained in the Section V discussion of Task 3.

4.4 The model demonstration proved that collection of the data required by the model is feasible and that when the data is used as input, the computer programs are operational. The mathematical relationships established within the model are valid as evidenced by the contents of Table 1, which illustrates the close comparison between requirements projected by the model and actual manpower requirements by personnel type for the 1968-1969 school year in a midwestern special school district.

4.5 It should be noted that the longer a special education program has been operating, the more stable will be its associated yearly data. Each year that data is collected and the model is utilized, the data will improve in reliability (with reasonable stability attained in four to five years) and the model results will be more valid.

## SURVEY FINDINGS

4.6 In surveying the 50 states a great variety was found in those administrative facets of handicapped child education which affect the flow and utilization of special education information. The variables that were found to affect the model application potential are listed below and are discussed individually in subsequent paragraphs.

- Distribution of responsibility for the education of handicapped children
- Types of state special education organizations
- Type and detail level of the data available at the state special education agencies
- Need for additional special education data
- Attitude toward model application
- Legislative, geographic and fiscal factors
- Existing information flow characteristics
- Availability of model data elements
- Availability of resources for model application.

### Distribution of Responsibility for the Education of Handicapped Children

4.7 Responsibility for the education of handicapped children almost never belongs to one state agency alone. Other state agencies besides the education departments have a portion of the responsibility. Most frequently involved are the departments of public health, mental health, and social welfare, and autonomous state institutions. Guidelines generally exist for the assignment of a child to any one of the services, but they are not always well-defined.

## TABLE 1

## DEMONSTRATION OF VALIDITY OF PROJECTIONS MADE BY THE MANPOWER REQUIREMENTS PROJECTION MODEL

Comparison of 1968-69 Manpower Requirements — Projected vs Actual

| Personnel Type | Manpower Requirements | |
|---|---|---|
| | Projected By Model | Actual |
| Teacher of TMR - Elementary | 14.52 | 15 |
| Teacher of TMR - Secondary | 10.42 | 10 |
| Aide for TMR | 13.05 | 13 |
| Teacher of EMR - Elementary | 75.19 | 77 |
| PE Teacher of EMR - Elementary | 1.23 | 3 |
| Language Development Teacher of EMR - Elementary | 8.58 | 9 |
| Speech Therapist - EMR - Elementary | 2.39 | 7.5 |
| Teacher of EMR-SI - Elementary | 5.96 | 6 |
| Assistant for EMR-SI - Elementary | 2.86 | 3 |
| Teacher of EMR - Secondary | 50.15 | 50 |
| Driver Education Teacher of EMR - Secondary | 1.00 | 1 |
| Vocational Home Economics Teacher of EMR - Secondary | 1.74 | 2 |
| PE Teacher of EMR - Secondary | 1.22 | 3 |
| Industrial Education Teacher of EMR - Secondary | 1.76 | 2 |
| Teacher of OH - Elementary | 11.99 | 12 |
| Teacher of OH - Secondary | 3.29 | 5 |
| Aide for OH - Elementary | 9.02 | 9 |
| Aide for OH - Secondary | 1.46 | 3 |
| Physical Therapist for OH - Elementary | 2.73 | 2.9 |
| Physical Therapist for OH - Secondary | .50 | .6 |
| Occupational Therapist for OH - Elementary | 3.25 | 3.3 |
| Occupational Therapist for OH - Secondary | .27 | .2 |
| Teacher of VH - Elementary | 3.01 | 3 |
| Teacher of VH - Secondary | 2.32 | 3 |
| Teacher for Special Learning Disabilities | 9.16 | 6 |
| Assistant for Special Learning Disabilities | 2.58 | 3 |
| Social Worker - SLD | .99 | 1 |
| Teacher of the Deaf - Preschool | 3.59 | 6 |
| Teacher of the Deaf - Elementary | 11.70 | 11 |
| Assistant for Deaf - Preschool | 1.78 | 3 |
| Assistant for Deaf - Elementary | 4.34 | 4 |
| Teacher of Deaf - Secondary | 1.68 | 2 |
| Hearing Clinician - Elementary | 7.29 | 7 |
| Hearing Clinician - Secondary | 1.82 | 2 |

SI - Special Instruction OH - Orthopedically Handicapped VH - Visually Handicapped SLD - Special Learning Disability

4.8 The reasons for the dispersion of responsibility include:

a. Jurisdictional assignments which might occur when services for a handicapping condition are provided by several sources (e.g., state institutions, local public schools, or other state agencies) — For instance, a blind child residing in a district providing no public school special education program for that handicap may be assigned to a state institution for the blind, whereas a child residing in a district where such a public school program is available may not be eligible for institutional services. On the other hand, a vocational rehabilitation department may have programs for training educable mentally retarded children for a vocation in a district where there are also public school special education programs for the same age range. The point at which the responsibility passes from one agency to another may be nebulous.

b. Functional assignments established by the organization of state services — This type of responsibility dispersion may arise, for example, in an area where a mental health agency exists and responsibility for the education of children with certain forms of mental handicap is included in its functional charter. In some instances a state agency was established to service a particular handicapping condition recognized at the time of its charter. Since its establishment, new services have become available, but responsibility for them has been assigned to a different agency. Because of historical involvement in state legislative and organizational structures, the original agency continues its function, and dispersion of responsibility is maintained. This kind of situation most frequently occurs in the area of education of the mentally retarded.

c. Specialization capabilities in a particular handicap area, such as public institutions for the blind or the deaf.

d. The existence of private educational services — While private organizations have no legislated responsibilities, they are an additional source of special education for handicapped children. Some states provide tuition payment and rely upon specialized private facilities to serve certain types of handicapped children. In some cases, private institutions are a means of circumventing legislative fiscal constraints.

4.9 There are additional variations in the reasons for the fractionalization of educational services to handicapped children, but, for the purposes of this study, the reasons are only important because of their effect on the special education information flow and the use of the Manpower Requirements Projection Model. Each additional agency, autonomous institution, and private facility adds to the complexity of establishing data collection procedures and data consistency. Another factor which arises indirectly from this fractionalization is that in many states the personnel qualifications for teaching handicapped children vary from agency to agency, state school to state school, and of course, from one private school to another.

## Types of State Special Education Organizations

4.10 The organizational hierarchy and function of the individual state special education agencies has an important bearing on the information flow. The state special education agency almost always serves the state's public school system and has additional responsibilities in other areas (e.g., state schools and institutions, private facilities), depending upon individual state legislation. Organizationally, the agency is contained within the state department of education (or public instruction, etc.), but its level within the state department varies considerably. In some states, the director of special education is directly responsible to the superintendent of education (or his equivalent) and in other states he may be several levels removed.

4.11 The special education intra-agency organizations also exhibit a variety of structures. In some states, particularly where the staff is very small, each staff member, although primarily responsible for a specific portion of the whole job content, can "fill in" to perform other special education duties. In such cases, communications and information flow within the agency are good. The other extreme involves complex agencies where there is a specialist for each handicap condition and coordination among staff members, even to the request of data from the locals, is minimal or nonexistent. This causes variations in the level of data detail available at the state agency, to say nothing of the deluge of information requests that can be imposed upon the local school districts.

4.12 The functions of the special education agency also vary widely from state to state. The range of legislated responsibilities runs the length of the spectrum from practically no responsibility to rather complete control of the state's education effort for handicapped children. Agencies may

a. Oversee distribution of funds, exercising only enough control to obtain information upon which to base fund disbursements.

b. Provide guidance to local education agencies for the formulation and development of special education programs — This entails more involvement at the local level and a better knowledge of local procedures, definitions, and facilities.

c. Enforce state special education regulations pertaining to diagnosis and establishment of classes, approval of curricular content, teacher approval, individual child applicant approval — This may also include provision for coordination with other state agencies and private facilities involved in the education of the handicapped.

4.13 Insofar as the model is concerned, the organizational structure is important only in that it reflects on the ability of the special education staff to influence the data from the public schools and other state agencies and private facilities.

4.14 The functions for which the special education agency is responsible correlate rather well with the information that is made available to them. The study findings indicated that the more involvement the state staff has with the local agencies, the better is their "leverage" for requesting, and obtaining data.

## Level of Data Available at State Special Education Agencies

4.15 One of the first tasks performed in the analysis of each state's information flow system was to determine the level of detail available at the state level for the data elements required by the model. During the course of the survey, analysis revealed a variety of levels, both within and among special education agencies. Frequently, the functional responsibility of the special education agency was found to dictate the level of data available, since little more than the data required by the agency is collected or aggregated.

4.16 The following descriptions of types of information collected indicate the various levels of available data:

a. Sufficient to support financial disbursement only — This is generally very aggregated local education data which reflects the basis used for fund allocation, for example, the total number of children served, by handicapping condition.

b. Sufficient only to satisfy the requirements to qualify for Federal assistance such as the Title VI-A Plan — In this respect, the Federal accounting requirements become a prime motivator for developing information flow.

c. Sufficient to satisfy the specific needs of only a portion of the special education programs — With decentralized intradepartmental collection procedures similar data, applicable to all handicaps, is not collected; detailed data becomes available only for the specific programs polled.

d. Sufficient for a specific purpose, possibly to reinforce some request to the legislature — This kind of data, contained in non-routine reports (special one-time surveys), is allowed to become obsolete until there is need to initiate another special survey. Occasionally these non-routine reports were found to contain the level of detail required for model application, but the data was either obsolete or the mechanism for continued collection of the data was nonexistent.

e. Sufficient for projections, based upon a state's individual model — Projection data was found to be available in varying degrees of accuracy for numerous different subjects including child populations, special handicap conditions, special education manpower requirements, pupil enrollments, etc. Although the rationale for many of these projections does not provide for all of the elements that would affect the projections, the fact that some states are making an effort to anticipate their problems and plan for their solution is encouraging, since it is likely to increase the desire and need for the Manpower Requirements Projection Model.

f. Sufficient to provide statistics for annual reports detailing the accomplishments of special education for the previous year — Many of the state special education agencies have elements of information flowing to them that describe the status of services. In some states, the level of detail approximates the requirements of the MRPM, and with modification, could be the basis for the necessary information flow.

4.17 In summary, it was found that although the current level of data detail at the state level could not support the model, in many cases only minor modifications to an already existing information flow would be required to provide data sufficient for initial model implementation.

Need for Additional Special Education Data

4.18 In many of the states visited, it was found that the information available to the special education staff was inadequate for their requirements, even without consideration of the MRPM. In almost every state it was readily admitted by the directors of special education that there are elements of data which would be very useful to them, but which for various reasons they do not now collect. The reasons for this information shortage include:

a. Insufficient funds

b. No authority to collect data from LEA or other agencies

c. Lack of staff for processing and analysis purposes

d. Need for guidance in setting up data collection procedures.

4.19 Additional data is needed by many of the state special education agencies to document services provided, to analyze the status and effectiveness of services, and to plan for both the existing level of activity and model application. The requirement for data collection for model application purposes could provide the impetus to initiate improved data collection procedures in many states.

## Attitude Toward Model Application

4.20 All of the 50 state special education agencies cooperated completely with the analysts conducting the survey. After the analyst explained and discussed the model application objectives, data element requirements, and the existing information flow with the special education director (and in many cases, with officials of other affected agencies), the attitude of the state personnel toward the Manpower Requirements Projection Model was evaluated.

4.21 In most cases, the directors were primarily intrigued by the potential for additional data which might become available to them. They did not always agree that all of the specified data elements were necessary or applicable to their particular situation, but they did feel that the basic elements would, for the most part, be useful for operational analysis. Where the full concept of the model potential was well understood (as was generally the case), a definite interest in utilization of the model was exhibited. However, the actual availability of the model and suggestions as to how it may be implemented will help the directors to evaluate model capabilities and decide whether to use them.

4.22 In a few instances, the current gap between manpower supply and requirements is so great that the need for projecting requirements is too distant a problem. In such cases, the directors considered model application to be an academic exercise. When this condition obviously existed the survey analyst concentrated primarily on developing an interest in creating an information flow to provide the necessary data for the future, when manpower requirements projection would prove to be a practical planning aid.

## Legislative, Geographic, and Fiscal Factors

4.23 Among the set of variables that affect model application is a group of conditions that reflect each state's unique characteristics. The effect of each of these conditions on the complexity of the information flow, and hence on the model application, varies from state to state.

4.24 Handicap Definitions. Each state applies its own definitions to the handicapping conditions. These definitions are the basis for diganostic classification and determine the type of service the child will receive. Even the definitions of the basic handicap groups may vary from state to state. In some states, the deaf and hard of hearing are grouped in the "hearing impaired" category; while in other states the hard of hearing may be included in a "speech and hearing" category (which excludes the deaf). The definitions are statistically important because they define which children are served by a specific type of special education program; this in turn affects the special education personnel requirements.

4.25 Handicapped Areas Served. This set of variable refers to the handicapping conditions served and the educational programs available to serve them. A child with a handicapping condition may receive his education in a state residential school, a public school special education class, a special day school, a resource room, or by an itinerant teaching program, depending upon the special education policies of the state. Which programs a state utilizes may affect the manpower requirements because teacher/pupil contact ratios may vary from program to program by handicapping conditions served.

4.26 Fiscal Attitude Toward Special Education. The state agencies are in competition with each other for the allocation of the available state funds. It is not unusual to have a state's special education budget controlled not by the services needed but by some fund distribution formula that gives special education its "piece of the pie." This of course reflects on manpower requirements projections because it introduces another dimension into the overall problem of satisfying these requirements. Here, however, good information and projections can be most useful by presenting factual evidence to support service requirement claims.

4.27 Mandatory Legislation. This type of legislation serves at cross purposes. Its objective is to ensure education services to the handicapped by specifying that when a community has a certain number of children requiring special education, it must arrange to provide it. This intent is good; however, too frequently the funds are not available at the local level to provide the needed services and the local agencies avoid identifying handicapped children, to circumvent the legislation. This slows the diagnostic process and seriously distorts the true measure of annual incidence. In states where mandatory legislation exists without the funds to serve each identified child, some consideration should be given to permit diagnosis and identification without forcing the community into a financial commitment it cannot meet. In addition to distorting incidence, under mandatory legislation it is difficult to get a true measure of the handicapped child population, and thus, of special education requirements of a state.

4.28 Local vs State Sponsorship. This characteristic becomes important when local sponsorship of services deprives the state of any flow of information pertaining to special education efforts. In some states, special education programs must receive the approval of the state agency regardless of the source of sponsorship, while other states pride themselves on the local autonomy of their special education programs. The net effect of this characteristic is really dependent upon the communication that is permitted to exist between local and state levels.

4.29 Population Density/Dispersion. In some states there are areas so sparsely populated, and the geographic distances between even small population centers are so great, that regular education service poses a problem, to say nothing of special education. In such areas handicapped children either receive no services or the services of a regular education teacher who, if the child is fortunate, will have had at least some special education training or guidance. These problems must be considered when making manpower projections. In the first place, normal teacher/pupil contact ratios cannot apply because of the low possibility of finding enough children with the same handicap condition for even a minimum sized class within a feasible transportation range. In addition, there is difficulty in attracting qualified personnel to such remote areas.

4.30 Manpower Availability. The availability of qualified special education personnel is affected by several considerations, not the least of which is money. One state may have little difficulty in obtaining qualified teachers because of a good pay scale, while a neighboring state offering lower pay "goes abegging." An understaffed state may have good university training programs but lose its potential manpower because of salary limitations. The wide variation in teacher training requirements and certification is another factor affecting manpower acquisition. Other factors such as the special education "atmosphere" in a state or locality, and the previously mentioned geographic dispersion problem have an influence upon special education manpower.

## Existing Information Flow Characteristics

4.31 The 50-state survey revealed a variety of characteristics that are found in state information systems. The combination of data elements into a system was often not the result of a preconceived information system design, but was, rather, the result of building on information already available, or the cumulative result of special information requirements.

4.32 Type of System. Obviously, the information available at a state special education agency will either be derived specifically for special education use or extracted from a system designed for other users. The survey indicated that if the information is of the former type, its level of detail is likely to approximate that required by the MRPM. However, data extracted from a system used primarily for other purposes (e.g., a regular education information system) is generally too highly aggregated for model use. This is not meant to imply that special education information could not be compatible with another system or, for that matter, be a subsystem of another system. It does mean, however, that the system from which special education information is successfully extracted must provide for those data elements unique to special education requirements.

4.33 A pupil accounting system (PAS) that is designed for the state's overall education system can be fully responsive to special education needs if it also provides the additional special education data elements. A data summary system (wherein detailed data is collected at the LEA, but the LEA summarizes the data before transmittal to state level) can also satisfy model requirements if summarization is by the required categories.

4.34 Of course, the condition was also found wherein the available data was not derived by any systematic method, but was assembled through unofficial informal channels. This type of data was generally incomplete in that all sources were not tapped and the methodology for repeating the data collection process was not established.

4.35 In summary, it was found that a small number of states (five or six) had, or were in the process of developing, information systems that were sophisticated enough to integrate both general education and special education information requirements. By far, the greatest majority of existing special education information systems are the result of the special education agency striving to collect that data which it needs to operate, and in many cases the results are minimal. These systems are characterized by a lack of cohesiveness in the data collection process and in data reduction. Often vital elements are missing which are required to make the existing data meaningful. There are a small number of states that essentially have no special education data other than that needed for financial allocations.

4.36 Basic Flow Patterns. The reporting flow patterns vary according to policies existing in each state. Possible general flow paths are:

a. Classroom to LEA to state level, with summarization at state level

b. Classroom to state level, with summarization at state level

c. Classroom to LEA, with summarization at the LEA and transmittal of the summaries to state level.

4.37 The initial source of enrollment data elements (enrollments, attritions, transfers) is generally classroom (or itinerant) teacher reports. In most states enrollment data is first transmitted to the LEA; then a copy is either forwarded to the state level or the LEA aggregates the data from a number of classrooms and forwards it to the state level. In some cases, however, the flow of information is directly from the teacher to the state education agency (SEA).

4.38 Data on children identified as handicapped but not enrolled in a program, is usually reported by the LEA when it is available. In some states this data already exists in detailed form at state level because child application approval is at state level.

4.39 Personnel data, excluding initial certification, is frequently submitted, by the LEA to the SEA, in special education program or class approval plans. In many instances, however, this basic source of information for determining active teacher personnel is not utilized, with the result that a roster of active personnel is not available at the SEA.

4.40 Very rarely is there a formal flow of special education data between state level agencies or between private schools and the state special education agency. One-time flow of data between these sources usually requires a special request (formal or informal), which must be renewed each time the data is needed.

4.41 Forms Variations. As might be expected, the variety of forms encountered was all but endless. Variety among states is immaterial, but the variations in reporting formats that occur at all levels within many states certainly contribute to the data preparation work load, to say nothing of negative effect on data consistency. Many states had unique forms for each handicap condition and also employed different reporting procedures for each handicap. The necessity for unique information about each handicapping condition is obvious, but much of the data is also standard. Recognizing this fact, some states have organized their handicap reporting forms so that the portion containing standard data is arranged in the same format on all forms.

4.42 It was obvious to the survey staff that the reporting forms used in many states were designed by people inexperienced in the requirements of good forms format. Awkward data arrangements, insufficient space for data insertion, misleading column titles, confusing directions, and repetitious data were some of the more common problems. Rarely had any consideration been given to the ease of data conversion directly from the forms into automated data processing systems. In some states, each handicap specialist is permitted to design and circulate for completion those forms which he deems necessary to the collection of data for his area of specialization. Ironically, much of the data collected by some states is never aggregated or even subjected to individual analysis.

4.43 Degree of Automation. Many of the state education agencies are becoming aware of the advantages of using automated data processing techniques in their general education programs. However, the use of automated data processing procedures is frequently not considered by special education agencies. The need for these procedures is often not even recognized, for the agencies are too accustomed to starving for information and making do with the little data they are able to manually assemble. On several occasions the survey analyst, during his visit to the state, established the first communication between the special education agency and the data processing agency charged with the responsibility for providing data processing support.

4.44 There is little doubt that the states already utilizing automated processing will most quickly apply the MRPM. Certain states, because of their small populations and paucity of special education programs will be able to manually aggregate data for some time to come. Unfortunately, there may be a correlation between a lack of need for efficient data processing procedures and inadequate special education services.

4.45 Time Period Variations. The reporting cycles that are in effect in a state are usually linked to the need for providing budgetary data. In most cases this is consistent with the operational data needs of the educational system within the state. Unfortunately, there are occasions when the processing of non-budgetary data is so delayed that it is obsolete before it becomes available.

4.46 The establishment of a common time frame for all state to report the findings of the MRPM to BEH is recommended, but the fact that findings may be based upon different time periods must be considered during any analysis of combined results. Changes in the reporting cycle within a state may be constrained by many other governmental procedures that are little related to special education.

## Availability of MRPM Data Elements

4.47 Full application of the Manpower Requirements Projection Model requires that several categories of data elements by available. These include

a. Children identified as needing special education

b. Unidentified handicapped child population (estimate)

c. Mobility of children into, within, and out of the handicapped child population

d. Special education simulation variables

e. General child population projections

f. Special education personnel supply (optional).

The current availability of the data within these categories, and the potential for data development, are discussed in the following paragraphs. A general comment that applies to all elements is that seldom were data pertaining to the total of handicapped child services available in one set of records or in one data bank. Usually, each agency, autonomous state school, and private school maintained its own records for the children within its jurisdiction.

4.48 Children Identified As Needing Special Education. This category is divided into two areas — enrolled, and identified and waiting to be enrolled. "Enrolled" refers to the handicapped children who are currently receiving educational services in a recognized special education program. "Identified and waiting to be enrolled" refers to the children who have been diagnosed as needing special educational services, but for some reason are not yet enrolled; this group constitutes the special education waiting list.

4.49 The enrolled children are almost always accounted for, in one way or another, at state level. However, to be useable by the MRPM, it is necessary that enrollment data be broken down by age, handicapping condition, and education program. Enrollment data by handicap group was usually available, but further delineation, when it did exist, was generally by education level (elementary, primary, intermediate, secondary, high school, etc.) and not by individual year of age. This, of course, is not satisfactory for model application because the age mix within the education level of the handicapping condition (target group) is not known. Many states were able to provide totals by handicapping condition and educational program, however, educational programs were not always well-defined. Residential schools and itinerant programs were the easily identifiable extremes but, aside from grouping the children into "special classes in regular schools," other program areas were not too well established for reporting purposes.

4.50 Records pertaining to those children identified and waiting to be enrolled were scarce at state level and, when available, were usually uncompiled and incomplete. Some states are making provision for collecting the waiting list data by including it in the information items requested from the LEA.

4.51 The establishment of meaningful waiting list data is complicated by several serious problems, one or more of which occur in 80 percent of the states. One of the major problems, and of course a very basic one, is the inability of states to provide the diagnostic services needed to positively identify the conditions of children referred, or in the absence of referral, to seek out and identify the children requiring services. The shortage of funds, qualified diagnostic personnel, and diagnostic facilities prohibit many states from servicing more than those children who have been referred as potentially needing special education services. In fact, it is not unusual to limit diagnosis to the extent necessary to fill existing or near future special education openings.

4.52 Another problem complicating the establishment of total waiting list data is the multiplicity of sources for both referrals and diagnoses, and the level of authority to which the findings are reported. Referrals can be made by parents, doctors, teachers, school nurses, welfare and legal agencies, etc. They can be made to school superintendents, to state agencies such as special education, health, mental health, welfare, and to public and private clinics. Some states have established a formal procedure to be followed in the diagnostic process and in such cases it should be possible to assemble data on those children who have been diagnosed and have not received a special education assignment. (It cannot be assumed, however, that such a list is representative of all children requiring services unless diagnosis is not constrained by funds, personnel, or policy). In states where the reporting of referrals and diagnosis is less formal, or where the operations of the LEA are mostly autonomous (resulting in state-wide inconsistency of policy) the potential for collecting useable waiting list data is slight.

4.53 Another problem that affects the potential for obtaining waiting list data has been mentioned previously in connection with the variables affecting special education program services. Mandatory legislation — that policy which places the responsibility on the LEA to provide each identified child with special education services — frequently serves as a restraint to the referral and diagnosis of potentially handicapped children. Referrals are not made, nor are diagnoses performed unless personnel, facilities, and funds are available. Thus, in a community that may not be able to serve any additional "identified children," no waiting list exists because no children beyond those who can be served have been identified.

4.54 The major causes for the lack of "identified but unserved" data have been discussed. For these reasons, such statistics are not often used as a basis for planning for additional special education requirements.

4.55 Unidentified Handicapped Child Population. In the absence of comprehensive diagnostic capability, most states use prevalence rates to estimate the number of children in each category of each handicapping condition. Although a few states use rates based on special studies, most states use the national prevalence rates, or modifications of the national rates. These constitute the best available tool for estimating the handicapped child population, although officials frequently feel that some of the rates in the set are not accurate for their particular state.

4.56 Handicap census is another technique employed by some states to estimate their unidentified handicap population. Such surveys generally utilize a questionnaire to be completed by personnel not skilled in diagnostic techniques. Regular classroom teachers or other participating personnel are asked to categorize classroom children and/or to visit homes to ask parents about preschool age children who may be handicapped. One problem is that to determine the validity rate of the census, a correlation must be made between these "unskilled diagnoses" or referrals and an actual diagnosis. In addition, too frequently the census is conducted on a one-time or sporadic basis and validation through the accumulation of follow-up statistics becomes difficult.

4.57 A few states are pioneering in a census method designed to greatly reduce unqualified diagnostic classification by providing the "census taker" with a series of symptoms (observable indications) which can be applied to a child's behavior without the need for diagnostic categorization by non-professional personnel. The symptoms are then reviewed by qualified personnel who categorize the child. The objective is to provide greater quantities of more accurately based referrals.

4.58 Mobility of Special Education Population. The size of the identified handicapped child population in a state is altered by the addition of new children, including new enrollees and incoming interstate transfers, and by attritions (graduations, dropouts, outgoing interstate transfers, deaths, etc.) which deduct from the total population. The availability of data pertaining to these mobility factors was almost always not satisfactory for MRPM purposes.

4.59 Data on new enrollees and incoming interstate transfers was usually not available at the same level of detail as were enrollment data.

4.60 Records on newly diagnosed children, where diagnosis was tantamount to enrollment (diagnosis only when capacity was available), were usually available by age and handicapping condition at state level if enrollment data were reported on each individual student. The date of enrollment is frequently a part of the reporting record. This information is almost certainly known at each LEA; however, where the newly diagnosed children are not immediately enrolled, the availability of the information is on a par with the waiting list data previously discussed.

4.61 Attrition data by handicapping condition does appear in many state special education records. However, a breakdown by cause of attrition appears less frequently, and attrition by single year of age was almost never available. Most states recognized the utility of such data and, as a result, this will be one of the easier data elements for which to develop collection procedures. Only a minimal modification to existing systems will be required.

4.62 Special Education Simulation Variables. To fully utilize the simulative capabilities of the model, certain types of background data are required. Educational program mix trends are one of the data elements useful in the projection of manpower requirements because their variation can affect manpower requirements. Many states had enrollment data by handicapping condition and education program (residential, special day school, special class in a regular school, itinerant, etc.), but, as previously discussed, the program breakdown frequently included only three divisions — residential, itinerant, and the area in between these two. The state survey indicated that historical records will usually contain sufficient data to enable special education consultants or staff to plot an interpretation of trends in program mix.

4.63 Other simulative data elements include personnel types and personnel/pupil contact ratios. The model requires that these categories of data be available by target group (subsets of the handicapped population having major distinguishable special education personnel requirements). Almost all states required that direct contact personnel have some special qualifications to serve handicapped children and most of these states required that the qualifications be unique to the handicap area in which the personnel were to serve. Thus, the identification of a teacher of the blind, a teacher of the mentally retarded, a speech and hearing therapist, etc. was generally possible through available data. However, few states required a specific qualification by education level (elementary, secondary, primary, intermediate, etc.).

4.64 Personnel/pupil contact ratios for a state's public school system are almost always specified by state legislation, or department of education or special education agency directives. These ratios usually were found to vary according to the requirements of a handicap group, but, most frequently, there was no variation in the ratio within the handicap group because of education program (except for itinerant caseload ratios) or educational level. There were some states that specified only one personnel/pupil contact ratio for all handicap conditions. Whatever the personnel/pupil contact ratio, it was always obtained easily insofar as the public school systems were concerned. In most instances, these ratios were not formally documented for state institutions or private schools. Each institution or private school usually had its own ratios which could vary radically according to the nature of services provided and the educational policies in effect.

4.65 Yearly Projections of General Child Population, By Age. Many states had population projections or statistics that could be utilized in the preparation of annual population projections by single year of age, for the period for which the projections were desired. The basis for the derivation of these projections included

- Historical records by grade level
- General population trend predictions
- Time increments (1970-1975-1980-etc.), by age blocks (0-5, 6-10, 11-15, etc.).

This information was not generally available as part of special education data, but was available from various state level agencies responsible for statistical analysis (financial offices, planning offices, etc.).

4.66 Special Education Personnel Supply. Although this data is not necessary to the projection of manpower requirements, it would be necessary if a state wished to determine the gap between current manpower supply and requirements. This type of information is frequently obtained from individual forms and compiled for distribution as a special education personnel directory. The basic data was usually found to be available within the state special education office, and although it was rarely summarized and totaled by area of specialization, summarization was not too difficult.

Availability of Data Processing Resources

4.67 The resources necessary for the implementation and application of the Manpower Requirements Projection Model include both manpower skills and data processing hardware capability. The availability and adequacy of both varied widely among the 50 states. Existing levels of sophistication in information systems and organizational interfaces between education and data processing groups also varied from one state to another.

4.68 Manpower. To implement the information flow necessary to support the MRPM, several different types of manpower capability are required to perform the necessary functions of system design, data source determination, form design, input data preparation, programming, output format design, coordination, and output analysis. Talent of this nature was rarely found within the capability of the existing special education staffs because these skills are not indigenous to normal special education operations. In almost every state, however, there exists within the state government an organization which is theoretically responsible for providing special education with the type of technical support necessary to initiate and maintain an information flow. In practically all cases where such an organization does exist, it contains the type of personnel skills necessary to the implementation of an information flow and the application of the model. However, this organization may or may not be able to provide such services depending upon present work load, staff size, and priority of work. In many states, special education agencies receive few services as a direct result of their own requirements. (Frequently the services obtained are an offshoot of some other reporting requirement.) Generally, in those states where an information system responsive to special education needs did not exist, either the request for such services had never been made, the special education staff did not know how to formulate its data needs, or there was a lack of understanding or appreciation of what could be accomplished using such services. This is not too surprising since special education personnel are, by nature or profession, primarily "people-oriented" rather than "systems-oriented."

4.69 Some of the manpower skills required, such as systems coordination and data output analysis are very much a part of the capabilities that special education staffs should possess (and in most cases do possess). However, the unavailability of the necessary staff for additional data development efforts was characteristic of the understaffed status of many special education agencies.

4.70 In summary, the personnel required to initiate and maintain the information flow were usually available, although the personnel for application to the tasks necessary to accomplish the flow was very frequently in short supply.

4.71 Hardware. The computer hardware capacity that is required falls into two categories: capacity to process an information system, and capacity to process the Manpower Requirements Projection Model.

4.72 Most state education agencies theoretically had the hardware capability, or access to it through other agencies or universities, to process an information system. However, the special education agency's actual access was frequently limited because of lack of machine availability, often the result of the low priority that was assigned to special education processing needs. This actual limited access is evidenced by the fact that, at the time of the survey, approximately a third of the state special education agencies were utilizing automated data processing techniques in their own information flow. Since the survey visits, a few states have begun using an automated system for the first time.

4.73 The hardware capability requirements for the model generally exceed those of an information system primarily because of the need for approximately 24-thousand word storage capacity. Even so, sufficient computer capability to run the MRPM program was present, if not always available, in over 80 percent of the states. Only six or seven states did not have a FORTRAN compiler, required by the MRPM computer program.

## SURVEY CONCLUSIONS

4.74 After completing the state visits, the survey staff prepared individual state analysis reports. These reports contain an evaluation of the data element availability, MRPM implementation resource requirements, and recommendations for effecting an information flow that would support MRPM application. The individual state analysis reports are contained in Part D, State Analysis Reports.

4.75 The summarized conclusions resulting from the analysis of all the individual state reports are contained in the following paragraphs. Not every conclusion applies to every state; rather, these conclusions present a broad overview of the status of special education information systems across the 50 states.

### Status of Special Education Information Flow at State Levels

4.76 Few states have special education information systems that are capable of providing management type information, that is, data that has predictive as well as evaluative applicability. The need for additional data to document services provided, analyze program status and effectiveness, and provide a base for predictive planning is quite evident. A major upgrading of the information flows within almost all states is indicated. To accomplish this objective, changes will have to be made by the states — major in some, and relatively minor in others.

4.77 The basic modification that applies to the majority of states is a change in thinking as to what purpose information can serve, and what must be done to obtain the necessary information. Many of the state special education agencies accept what data they have available to them and manipulate it into some sort of status report to the legislature and the public. There is an admission that more information could be useful to them in the management of operations, but many special educators are not skilled in the techniques of information system development. Data flow development often takes a low priority compared to education program development.

4.78 The first step in upgrading the information available to special education administrators is to provide the agencies with an understanding of what types of information can be made available, how to obtain it, and how to use it. The state survey conducted in conjunction with the Phase III effort has already accomplished this to an extent — at least 12 states have undertaken some modification of their information requirements as a direct result of discussions on Manpower Requirements Projection Model data needs. This does not necessarily mean that these states are going to immediately adopt the MRPM for their use, but they have recognized the utility of many of the data elements for management of their present operations.

4.79 Another major requirement for the improvement of information flow and data reliability is acceptance by special education agencies, both at state and local levels, of the fact that each data source and each data element is an integral part of the overall system. Increased data availability need not always require increased work in data collection. Frequently, coordinated and systematic data collection will require no increase in effort while yielding much additional information.

4.80 As previously mentioned, approximately one-third of the states are currently using automated data processing (ADP) techniques in the handling of their data. While there may be a few states that can rationalize their non-use of these techniques because of a small handicapped child population and/or the low volume of services that they can offer, the vast majority of states cannot easily obtain the information they need without benefit of ADP techniques. The manual operations are too time consuming for an already understaffed agency.

4.81 In very few of the states is the data pertaining to handicapped children inclusive of all of the sources of handicapped child education — public schools, state schools and institutions, and private facilities. Usually, each agency maintains its own records. While is is possible for a state special education agency to develop an information system that will contain the data pertinent to the areas of its own responsibility, this does not necessarily result in a total handicapped child data base. Such limited information would defeat the objective of the MRPM to project special education manpower requirements for the state's total handicapped child population. The reasons for the distribution within a state of responsibility for the education of handicapped children are not relevant to this study. It must be stressed, however, that interagency cooperation and communication are absolutely essential to the establishment of a common handicapped child data base that will be representative of the state's total service requirements and responsive to each agency's information needs. Further, in some states the special education agency's internal coordination and communication must be strengthened. Standardization of forms, data elements, data collection cycles, and timetables are all prerequisites to internal data flow stabilization.

4.82 Liaison between state level and local level special education personnel is also essential to the establishment of an information flow. In most states where state special education agency activity is confined to financial disbursements or where there is very little professional involvement, the information flow is minimal and often inadequate. Conversely, the greater the involvement of the state agency with the local agency, the better the information flow is likely to be. A corollary benefit to greater involvement is the improved capability of state personnel to analyze and utilize the information collected.

4.83 Although computer availability is a problem in many states, the relatively limited application of automated data processing (ADP) techniques to the special education information systems is more the result of a combination of other constraints. The lack of appreciation for the potential availability of additional information through the application of ADP, and a limited understanding of how to initiate and apply ADP techniques, are important obstacles to automating special education data processing.

4.84 The impetus to improve the information flow must come from within the special education agency. Additional leverage may be required to obtain the cooperation of the LEA and other state and private agencies. One of the first actions that must be taken is the application for priorities to obtain the services of ADP technical personnel for system design and for computer usage.

## Degree of Federal Involvement

4.85 The requirement to respond to Federal requests for information has been a prime motivator in the development of the existing special education information and further advancement in the quality and quantity of information will require continued Federal influence. Many state agencies need encouragement in the form of incentive and leadership. The MRPM is a form of incentive because, by providing the state agencies with management tools, it can help them to do their jobs better. The Phase III state visits provided initial leadership in many states by laying the ground work for improving the information flow and creating a desire for better data. The impetus that has been gained as a result of this effort should be supplemented and supported by continued Federal sponsorship of programs to assist the states with the development of their information systems.

4.86 A word of caution is warranted regarding Federal requests for information from the states. The more automated a state's information system, the quicker it can respond to information requests. However, a change in a data element to meet needs of the requestor can require considerable reprogramming at the state level. For example, in one instance a change in two data elements requested by the U.S. Department of Education caused the modification of 31 computer programs and entailed many man-months of effort. Changes should be thoroughly evaluated in the light of complications that may arise at the state level when responding to the request.

## Manpower Requirements Projection Model Application Potential

4.87 Among the objectives of the state visit were explanation of data element structure and the purpose of the MRPM, and analysis of the information flow necessary to implement the model. In the process of accomplishing these objectives, it was possible for the survey analyst to evaluate the potential for application of the model.

4.88 The first conclusion that can be drawn from these evaluations is that the data elements required to support the MRPM were in themselves viewed as valuable information. It was not regarded as feasible to obtain all of the needed data immediately (meaningful data pertaining to the identified handicapped children not yet receiving special education services was seen as among the most difficult to obtain). Nevertheless, acceptance of the usefulness of the information required for the MRPM was not diminished by data development problems. It was recognized that some elements will simply require time to be fully implemented.

4.89 Further acceptance of the model concept and its potential for application is based upon the utility of various aspects of the model. Because the model has several capabilities, it has an appeal for various types of users and thus has greater potential for application.

4.90 As an intermediate output, the model projects state handicapped population. Such projections can have a most immediate impact on fund allocations. Since special education agencies are competing more and more with other state agencies for available funds, appeals for special education funds must be based on statistics of supply and demand as well as on the importance of special education programs in the lives of handicapped children.

4.91 Another capability of the model appeals to those who must develop training and hiring plans to ensure an adequate manpower supply. The manpower projection feature of the model makes available relevant information upon which to base manpower budgetary estimates.

4.92 A third feature of the model, the capability to simulate changes in the provision of special education services, appeals to those who must evaluate the effect of changes in the educational, technological, or political atmosphere on the special education effort. This capability permits the insertion of representative factors to determine "what happens if" specified conditions occur in a state.

4.93 The second conclusion, then, regarding the potential for application of the model is that insofar as the model concept is concerned, implementation should be no problem, other conditions (hardware available and a satisfactory information flow established) permitting.

4.94 Assuming acceptance of the model concept, the one major consideration affecting implementation is the availability of an information flow capable of providing the required input. None of the states had data immediately available for satisfactory application of the model, although a few had the necessary collection procedures formulated and could probably implement the MRPM within one or two annual data cycles. The absence of unserved handicapped population data is the greatest drawback to rapid implementation. Most states have some diagnostic programs in effect. Programs are usually administered at the local level and children are enrolled where vacancies exist, but frequently no report of unserved or "waiting list" children is made to the state level. In such cases, a procedure is required for systematically reporting diagnoses of the child population and for placing children on waiting lists when services are unavailable. If individual states can be convinced of the value of implementing the necessary diagnostic reporting procedures, then the model can be partially implemented using initial data, with ever-improving data being received as diagnosis approaches saturation. Those states (approximately 12) having mandatory legislation which induces an artificial constraint on diagnosis, should consider a means of encouraging identification of handicapped children without creating a firm commitment to provide immediate services.

4.95 Most of the other data elements can be incorporated in the existing information flows in all but a few of the states, so that data should be available for implementation of the MRPM in from two to three annual data cycles once the decision is made by each state to go forward.

4.96 The estimated time frame for application of the MRPM, once the state special education agency has decided to undertake the necessary information flow design/modification and implementation, is summarized in Table 2, Estimated Time Frame For MRPM Implementation. The table also provides an indication of those states currently using automated data processing techniques in their present special education information systems. Those states that have initiated some action to improve their information flow and obtain MRPM data elements as a direct result of the survey visits are also shown.

4.97 Hardware availability remains as the last requirement upon which to draw a conclusion. As previously discussed, this is a two-pronged requirement; one requirement is for an information processing computer capability and another is for model application capability. As for the information processing capability required, adequate computers do exist in almost all state agencies although actual availability is scarce in some instances. Wherever possible, special education will have to establish a usage claim in order to be able to use the computer facilities. In most of the cases where the state computer facility cannot handle an additional work load, service can probably be obtained from a state university or procured from a contractor.

4.98 Although MRPM application requires greater computer storage capacity than most special education information processing needs, the large majority of states had satisfactory computer capability or access to it. Further, the small amount of time required per application (approximately fifteen minutes) should create no real difficulty in the scheduling of computer use. It is concluded that computer availability should be no serious problem to model implementation.

4.99 Based upon analysis of survey findings in all of the states, overall conclusions regarding the MRPM are summarized as follows:

- The model is much needed.
- The concept has been favorably received.
- Some surmountable problems will be encountered in creating the necessary information flow.

TABLE 2

ESTIMATED TIME FRAME FOR MRPM IMPLEMENTATION

| State | Annual Data Cycles | | | | | Automated Data Processing Used by Special Education | Survey Initiated Action |
|---|---|---|---|---|---|---|---|
| | 1-2 | 2-3 | 3-4 | 4-5 | Over 5 | | |
| Alabama | X | | | | | | |
| Alaska | | X | | | | X | X |
| Arizona | | | | X | | | |
| Arkansas | | X | | | | | X |
| California | | X | | | | X | |
| Colorado | | X | | | | | |
| Connecticut | | X | | | | | X |
| Delaware | X | | | | | | X |
| Florida | X | | | | | X | X |
| Georgia | X | | | | | | |
| Hawaii | X | | | | | X | |
| Idaho | | | | | X | X | |
| Illinois | | | X | | | | |
| Indiana | X | | | | | | |
| Iowa | | X | | | | X | |
| Kansas | | | X | | | | |
| Kentucky | | X | | | | X | |
| Louisiana | | | X | | | | |
| Maine | | | | | X | | |
| Maryland | | | | X | | | |
| Massachusetts | | | X | | | | |
| Michigan | | X | | | | X | |
| Minnesota | | X | | | | X | |
| Mississippi | | X | | | | | X |
| Missouri | | | | X | | | |

TABLE 2 (CONT.)

| State | Annual Data Cycles | | | | | Automated Data Processing Now in Use | Survey Initiated Action |
|---|---|---|---|---|---|---|---|
| | 1-2 | 2-3 | 3-4 | 4-5 | Over 5 | | |
| Montana | | | | | X | | |
| Nebraska | | | X | | | | |
| Nevada | | | | | X | | |
| New Hampshire | X | | | | | X | |
| New Jersey | | X | | | | X | X |
| New Mexico | X | | | | | X | |
| New York | | X | | | | X | |
| North Carolina | | X | | | | | X |
| North Dakota | | | X | | | | |
| Ohio | | X | | | | X | |
| Oklahoma | X | | | | | | |
| Oregon | | X | | | | | X |
| Pennsylvania | | X | | | | | |
| Rhode Island | | X | | | | X | X |
| South Carolina | | X | | | | | |
| South Dakota | | X | | | | | X |
| Tennessee | | | | X | | | |
| Texas | | X | | | | X | |
| Utah | | X | | | | | |
| Vermont | | | X | | | | |
| Virginia | X | | | | | X | X |
| Washington | X | | | | | X | |
| West Virginia | | X | | | | | |
| Wisconsin | X | | | | | X | |
| Wyoming | | | | | X | | |
| TOTALS | 12 | 22 | 7 | 4 | 5 | 19 | 12 |

- There should be no serious constraints because of computer capacity limitations.
- Once the implementation decision has been made by the state, the MRPM could be operational in two to three annual data cycles in most states.

4.100 Conditions vary from state to state and in some states they may be more conducive to early MRPM implementation than in other states.

Current Implementation Status

4.101 Many of the states have indicated that they are anxious to undertake implementation of the model. As a result of the survey analyst visit, some states have already initiated steps to modify their existing data collection procedures to incorporate the changes necessary to provide the missing data elements. The basic ground work has been laid and the initial impetus provided, but additional Federal follow-up and involvement will be required to maintain an atmosphere of encouragement and cooperation.

Cost Estimates For Information Flow Implementation and Maintenance

4.102 The resources (manpower and hardware) necessary to implement and maintain the information flow recommended in each of the state survey analysis reports are detailed in the individual state reports. Appendix 2, Information Flow Implementation and Maintenance Cost Estimates, of this Part A Report contains a series of individual state tables that summarizes the resources and also converts these resources to a cost figure.

4.103 The contents of the Appendix 2 tables are summarized in Table 3, Estimated Cost Summary for Special Education Data Development and MRPM Application at State Level. This table contains the minimum and maximum cost estimates for each state for both the implementation and maintenance phases. Where only one system has been recommended the minimum and maximum estimates are the same. When alternative systems have been recommended the minimum and maximum estimates will vary. For details of system recommendation, refer to the individual state tables in Appendix 2 and to the individual state analysis/tables reports in Part D of the Phase III Report.

TABLE 3

## ESTIMATED COST SUMMARY FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MANPOWER REQUIREMENTS PROJECTION MODEL APPLICATION AT STATE LEVEL

| State | Design and Implementation | | System Maintenance (Annual Cost) | |
|---|---|---|---|---|
| | Min Estimate, $ | Max Estimate, $ | Min Estimate, $ | Max Estimate, $ |
| Alabama | 7735 | 8490 | 2915 | 3175 |
| Alaska [1/] | 4820 | 4820 | 1665 | 1665 |
| Arizona | 5525 | 7285 | 1425 | 1425 |
| Arkansas | 3430 | 4485 | 1510 | 1570 |
| California [1/] | 8670 | 8670 | 3500 | 3500 |
| Colorado [1/] | 5790 | 5790 | 1930 | 1930 |
| Connecticut | 12,105 | 12,10 | 5925 | 5925 |
| Delaware | 6315 | 6315 | 1660 | 1660 |
| Florida | 4780 | 4780 | 1385 | 1385 |
| Georgia | 7680 | 7680 | 2096 | 2096 |
| Hawaii [1/] | 1920 | 4290 | 790 | 1430 |
| Idaho [1/][2/] | 3665 | 3665 | 945 | 945 |
| Illinois [1/] | 7160 | 7160 | 2260 | 2260 |
| Indiana [1/] | 5510 | 5510 | 1440 | 1440 |
| Iowa [1/] | 6820 | 6820 | 2530 | 2530 |
| Kansas | 5005 | 6775 | 1960 | 2050 |
| Kentucky [1/] | 6055 | 6055 | 2915 | 2915 |
| Louisiana [1/] | 7665 | 7665 | 1610 | 1610 |
| Maine [2/] | 3485 | 3485 | 985 | 985 |
| Maryland | 6710 | 7970 | 1145 | 1145 |
| Massachusetts | 10,890 | 15,030 | 2890 | 2890 |
| Michigan | 4410 | 5955 | 1730 | 1730 |
| Minnesota | 6150 | 6150 | 2235 | 2235 |
| Mississippi | 8208 | 8208 | 1682 | 1682 |
| Missouri | 5495 | 8020 | 1855 | 3060 |

[1/] No computer usage costs assumed. [2/] MRPM application not recommended.

TABLE 3 (CONT)

| State | Design and Implementation | | System Maintenance (Annual Cost) | |
|---|---|---|---|---|
| | Min Estimate, $ | Max Estimate, $ | Min Estimate, $ | Max Estimate, $ |
| Montana [2] | 3535 | 3535 | 1520 | 1520 |
| Nebraska | 4835 | 6495 | 2080 | 2195 |
| Nevada | 9005 | 9005 | 1530 | 1530 |
| New Hampshire [1] | 2440 | 5065 | 1125 | 1380 |
| New Jersey [1] | 12,280 | 12,280 | 4225 | 4225 |
| New Mexico | 4990 | 4990 | 1350 | 1350 |
| New York [1] | 5710 | 5710 | 1630 | 1630 |
| North Carolina [1] | 5275 | 5275 | 1725 | 1725 |
| North Dakota | 4735 | 6185 | 565 | 1165 |
| Ohio [1] | 10,880 | 10,880 | 3110 | 3110 |
| Oklahoma [1] | 4870 | 8705 | 1440 | 1515 |
| Oregon | 9640 | 9640 | 1865 | 1865 |
| Pennsylvania [1] | 6840 | 6840 | 1510 | 1510 |
| Rhode Island | 5440 | 5440 | 1500 | 1500 |
| South Carolina [1] | 6420 | 6420 | 1155 | 1155 |
| South Dakota [1] | 6165 | 6165 | 950 | 950 |
| Tennessee [1] | 6670 | 8970 | 1405 | 1405 |
| Texas | 9105 | 16235 | 3040 | 4455 |
| Utah | 5960 | 5960 | 1730 | 1730 |
| Vermont | 3595 | 7080 | 1230 | 1370 |
| Virginia | 4035 | 5050 | 1460 | 1480 |
| Washington | 2900 | 2900 | 250 | 250 |
| West Virginia [1] | 7325 | 7325 | 1060 | 1060 |
| Wisconsin [1] | 6150 | 6150 | 1600 | 1600 |
| Wyoming [1] | 5475 | 5475 | 1550 | 1550 |
| Total | 310,273 | 350,953 | 91,534 | 96,463 |

[1] No computer usage costs assumed. [2] MRPM application not recommended.

# V. DESCRIPTION OF STUDY ACTIVITIES

## INTRODUCTION

5.1 This section details the activities which took place from the inception through the completion of this study, including the study objective, the procedure for its accomplishment, and the results of each of the contractual tasks.

5.2 This description is presented so that the actions necessary to accomplish the study objectives may be fully understood and so that the results may be evaluated in the light of the procedures necessary to accomplish them. It may provide some guidance for future studies involving broad survey and data collection scopes.

## TASK 1—REVIEW OF INFORMATION REQUIREMENTS

### Objective

5.3 The purpose of the review of the MRPM information requirements was to modify the definition of certain of the model's data elements, where such modification was necessitated by the total unavailability of the data or the possible misunderstanding of their description.

### Procedure

5.4 Representatives of the contractor and BEH met to discuss the results of the Phase II Pilot Survey and their implications on the original set of information requirements. The data elements to be requested of each state were reviewed, to enable the design of an effective data collection instrument to be used during the 50-state survey. Additionally, they discussed those data elements whose development required individual discussion with each state.

### Results

5.5 On the basis of the availability and reliability of the data requested during the Phase II Pilot Survey, it was decided to change the recommended definition of the set of target groups from the total handicapped child population (those identified plus those believed to exist) to the total identified handicapped child population. The main reason for this decision was the realization that manpower estimates based on a subjectively determined number of children would have little meaning. Since none of the five pilot survey states had any empirical data to support their estimates of their unidentified handicapped child population (usually calculated by applying the set of national prevalence rates, or minor modifications of them, to their school age population), it was reasonable to assume that this was the case nationwide.

5.6 Because the data collected during each state visit was to be used to make current, rather than projected, estimates of special education manpower requirements, data elements used by the MRPM to describe the movement of children into and out of each target group were dropped from the list of those to be collected. It was also decided to eliminate any further requests about the movement of personnel into and out of the field of special education, since a mathematical model to project manpower supply cannot be developed until after the completion of motivation studies.

## TASK 2—QUESTIONNAIRE MODIFICATION

### Objective

5.7 The purpose of the questionnaire modification was to produce a questionnaire that would contain a request for the data elements needed to calculate current manpower requirements, would be easily understood both by the interviewer and the interviewee, and would facilitate the analyst's compilation of the required information.

### Procedure

5.8 Representatives of the contractor and BEH met to discuss the wording and format of the questionnaire. The contractor then prepared the questionnaire for presentation to the National Center for Educational Statistics (NCES) and to the Bureau of the Budget (BOB) for their review and approval.

### Results

5.9 Slight modifications were made to the suggested definitions of the target groups and the educational programs, to increase their clarity. Requests for data about the number or rate of new entrants to and attritions from each target group were deleted from the questionnaire, as was the request for supply mobility information. The request for personnel employment data and estimates of unfilled positions was divided into two forms, and two additional education categories, doctorate and unknown, were added to the request for employment data. Although the breakdown of personnel employment data by education level is not needed to calculate manpower supply, these breakdowns were retained in the questionnaire at BEH's request.

5.10 The format of each matrix used to record the data was redesigned to make it easier for the analyst to use. The previous format had been oriented toward the state level special education administrators who were not thoroughly familiar with the MRPM and its information requirements.

5.11 Finally, the instructions were reworded to assist the analyst in the collection as well as the recording of the data.

5.12 Before the 50-state survey could commence, the questionnaire required the approval of NCES. The questionnaire was submitted to and approved by NCES before it was submitted to and subsequently approved by BOB.

## TASK 3—MODEL DEMONSTRATION

### Objectives

5.13 The objectives of the model demonstration (the actual application of the model in a real-world situation) were to demonstrate and document the validity and usefulness of the mathematical model, to correct any errors in the computer program of the model (REQMODEL), and to produce examples of the resulting computer output.

### Procedure

5.14 Because of the unavailability at the state level of the detailed data needed, it was decided to demonstrate the model in a large city or school district having a large handicapped child population, a variety of educational programs for serving each category of handicapped children, and at least 4 years of historical data. A midwestern special school district satisfying all the criteria was chosen.

5.15 During the visit to that school district, detailed input data was collected for each academic year from 1964-65 through 1968-69. Data concerning the handicapped population (e.g., enrollments, attrition rates, and new entrance rates) was collected by age for six handicapping conditions[1] and their associated education levels:

a. Trainable Mentally Retarded (TMR)
    1. Elementary—ages 6-12
    2. Secondary—ages 13-20

b. Educable Mentally Retarded (EMR)
    1. Elementary—ages 6-12
        (a) Regular
        (b) Special instruction (SI)

---

[1] Data for the Speech Impaired group was not sought because of the large size of the population and the limited amount of time allotted for the data collection.

    2. Secondary—ages 13-20

c. Orthopedically Handicapped (OH)

    1. Elementary—ages 6-13

    2. Secondary—ages 14-20

d. Visually Handicapped (VH)

    1. Elementary—ages 6-12

    2. Secondary—ages 13-20

e. Special Learning Disabilities (SLD): Ungraded—ages 6-14

f. Auditorially Impaired (AI)

    1. Preschool—ages 5-6

    2. Elementary—ages 7-13

    3. Secondary—ages 14-20.

5.16 From each year's enrollment data, program weights were computed and inputted into the model. Since average attrition rates were calculated and held constant for the time period of the projection, the parameter values, representing the factors that would normally influence the changes in these rates over time, were assumed to be equal to 1.0, a value indicating "no influence." The average new entrance rates were similarly treated.

5.17 Since this special school district serves the total diagnosed population, and because there is neither a diagnostic waiting list nor an indication that there should be one, the participation rate of the handicapped child population in special education was set at 1.0 (= 100%).

5.18 Data related to personnel was also collected. The actual number of each type of personnel employed during each academic year was used to compute the existing personnel/pupil contact ratios (i.e., personnel input proportions). It was assumed, based upon discussions with the city's special education administrators, that the change in the ratios from the year 1964-65 to 1968-69 was due wholly to the influence of personnel input policy and/or practice. Thus, the parameter values representing this influence on each personnel/pupil contact ratio were computed as the average yearly change in each ratio. The parameters representing the influence of education technology on each ratio were set equal to 1.0, a value indicating "no influence." Additionally, desired personnel/pupil contact ratios were obtained to allow comparison of manpower requirements generated on the basis of desired conditions.

5.19 Using the 1964-65 data as a base, the target group populations, actual personnel input proportions, and resulting manpower requirements were projected for 4 years, to the 1968-69 academic year. Census data for the general child population was inputted into the model. Samples of each of the four sets of outputs from the model run are presented in Figures 1 through 4.

5.20 The first set of output (Figure 1) contains the projected information for the handicapped child population and its related parameters. Figures in the columns labeled "Number," "Attritions," and "Entrants" are actual numbers of children. Thus, referring to Figure 1, there were 5.10 children of age 10 projected as new entrants to the TMR Elementary target group, TG (1), during 1967-68 (entering officially at the beginning of the 1968-69 academic year). Of the 29.78 children of age 10 in TG (1) at the beginning of the 1968-69 year, 3.64 are expected to attrite during the year. These figures are calculated, using the attrition rates [P (1) represents the rate of return to normal school, P (2) represents the rate of dropping out due to other nonmortality reasons, and P (3) represents the rate of mortality] and the actual incidence rates (rate of actual diagnosis) for the handicapping condition (represented as "Large E"). For each target group, the parameter "Small E" is used to indicate whether the previous target group represents the same handicapping condition and a lower education level. As an indicator, it has only two possible values: (a) Small E = 1 if any new entrants to the lowest age level in the target group are from the previous year's graduates of another target group representing the same handicapping condition, e.g., entrants to age 13 in the TMR Secondary are graduates of TMR Elementary, age 12 the previous year, and (b) Small E = 0, otherwise.

5.21 The second set of output data (Figure 2) contains the general child population information. These figures were calculated for input to the model by using the school district yearly census information and interpolating by single year of age, based upon Federally developed proportions of children in each chronological age.

5.22 The proportion of children enrolled in each program and the projected personnel/pupil contacts (contained in the third set of output) are shown in Figure 3. The personnel figures in the first five columns represent the number of students that each personnel type can serve during the course of one academic year (i.e., the personnel/pupil contacts); the personnel figures in the sixth column represent the weighted average of these personnel/pupil contacts across all educational programs. Referring to the sample page (Figure 3), although a teacher of EMR Elementary group serves 10.798 children, only .9457 of the children served in the target group are enrolled in the program requiring that teacher (Program 1). Thus, in effect, for every 11.418 children enrolled from that total target group, one teacher of EMR Elementary is required. The 11.418 is the weighted average for the teacher. Similarly, although an assistant for EMR-SI serves 16.286 children, only .0543 of the children being served in the

```
FOR TG (11) = AUDITORIALLY IMPAIRED - ELEMENTARY

     AT TIME T = 4, THE VALUES OF THE INDEPENDENT VARIABLES ARE


   AGE        NUMBER      ATTRITIONS      P (1)       P (2)       P (3)      ENTRANTS   LARGE E     COMPLETED PREV. TG LAST YR.
   ---        ------      ----------      -----       -----       -----      --------   -------     ---------------------------
    7          33.52         7.51        .2040000    .0200000       0          12.60    .0006895       20.917
    8          32.93         7.11        .1510000    .0650000       0           7.26    .0003883
    9          34.96        10.77        .2310000    .0770000       0           9.76    .0005366
   10          24.85         7.63        .1940000    .1130000       0           4.53    .0002484
   11          15.84         8.49        .1600000    .0600000       0           3.48    .0001918
   12          20.53        10.04        .4000000    .0890000       0           6.23    .0003442
   13          14.26         6.92        .3330000    .1520000       0           6.45    .0003660
             -----       -------                                            -------

TOTAL         176.89        58.49                                            71.22

              Small E = 1.0000000
              Medical Technology = 1.0000000
              Education Policy/Practice = 1.0000000
              Diagnostic Technology = 1.0000000
              Participation Factor = 1.0000000
```

FIGURE 1. TARGET GROUP POPULATION

FOR THE GENERAL POPULATION AT TIME T = 4, THE CENSUS FIGURES ARE

| AGE | NUMBER |
|---|---|
| 0 | 0 |
| 1 | 0 |
| 2 | 0 |
| 3 | 0 |
| 4 | 17383.00 |
| 5 | 18288.00 |
| 6 | 18510.00 |
| 7 | 18859.00 |
| 8 | 19287.00 |
| 9 | 18770.00 |
| 10 | 18807.00 |
| 11 | 18723.00 |
| 12 | 18663.00 |
| 13 | 18176.00 |
| 14 | 18066.00 |
| 15 | 17669.00 |
| 16 | 17335.00 |
| 17 | 16697.00 |
| 18 | 16317.00 |
| 19 | 15891.00 |
| 20 | 16070.00 |
| 21 | 0 |

FIGURE 2. GENERAL CHILD POPULATION INFORMATION

```
AT TIME T = 4, THE VALUES OF THE T/P RELATED INDEPENDENT VARIABLES
    FOR TG (11) = AUDITORIALLY IMPAIRED - ELEMENTARY                ARE

                PROGRAM TYPE DEFINITIONS -  1 = DAY SPECIAL CLASS
                                            2 = DAY SPECIAL SPEC. INSTRU.
                                            3 = COOPERATIVE SPEC. CLASS
                                            4 = RESOURCE ROOM
                                            5 = ITINERANT INSTRUCTION

                                                   PROGRAM TYPE                         WEIGHTED AVERAGE
                                                   - - - - - - - -                       - - - - - - - - -
                                           1        2        3           4           5

WEIGHTED PROPORTION OF CHILDREN        .5280000     0        0           0        .4720000
              (IN EACH PROGRAM)

PERSONNEL INPUT PROPORTION FOR -

     TEACHER OF DEAF - ELEMENTARY         7.000     0        0           0           0            13.258
     ASSISTANT FOR DEAF - ELEMENTARY     21.000     0        0           0           0            39.773
     HEARING CLINICIAN - ELEMENTARY           0     0        0           0      14.000            29.661
```

FIGURE 3. PROJECTED PERSONNEL INPUT PROPORTIONS

EMR Elementary target group are enrolled in Program 2; thus, for every 299.921 children enrolled from that total target group, one assistant of this type is required.

5.23 The final set of output presents the calculated manpower requirements, by personnel type. As shown in Figure 4, there were 75.19 teachers of the EMR, elementary level, projected as required during the 1968-69 academic year. These projected figures for the target group populations and resulting manpower requirements for the 1968-69 data year were compared with actual figures for that year. (See Tables 4 and 1, respectively.) In Table 4, differences between the projected and actual number of children of a particular age within a target group are due to the fact that actual attrition and entrance rates for any given year can vary greatly from average rates for the 4-year time span. In cases where individual rates vary so much, an average rate should be calculated from a minimum of a 5-year accumulation of data. However, it should be noted that the longer the special education program has been operating, the more stable its associated yearly attrition and entrance rates will be. Despite these differences between individual ages, the projected total number of children in each target group (the number used to determine requirements) is reasonably close to the actual total. The only exception to this is for the AI Preschool target group; the discrepancy here resulted from the very rapid rate of growth of the group during the last year of operation. In Table 1 (on page A-13 of this part), the comparison of the projected manpower requirements with the actual number of personnel employed is favorable.

5.24 Again, using the 1964-65 data as a base, a 4-year projection was done using desired personnel/pupil contacts. Comparison of the manpower requirements resulting from these two projections is shown in Table 5.

## Results

5.25 Two computer runs of the REQMODEL program were made, using the data collected in the modwestern special school district; on the basis of these runs, the validity of the model formulation was demonstrated. The feature of the model which allows a special education administrator to test the effect of differing assumptions, e.g., different personnel/pupil contacts, on the resultant manpower requirements was also demonstrated. Thus, the usefulness of the model was shown.

5.26 Projecting the target group population toward a known population enabled the programmer to catch and correct a few minor errors in the computer program, REQMODEL.

AT TIME T = 4, THE REQUIREMENTS ARE

| PERSONNEL TYPE | NUMBER REQUIRED |
|---|---|
| TEACHER OF TMR - ELEMENTARY | 18.22 |
| TEACHER OF TMR - SECONDARY | 8.04 |
| AIDE FOR TMR | 18.13 |
| TEACHER OF EMR - ELEMENTARY | 62.46 |
| PHYSICAL ED. TEACHER OF ELEM. EMR | 2.44 |
| LANG. DEVEL. TEACHER OF ELEM. EMR | 7.31 |
| SPEECH THERAPIST | 16.24 |
| TEACHER OF EMR - SI - ELEMENTARY | 2.59 |
| ASSISTANT FOR EMR - SI | 1.29 |
| TEACHER OF EMR - SECONDARY | 65.20 |
| DRIVER ED. TEACHER OF SECON. EMR | 6.14 |
| VOC. HOME EC. TEACHER OF SECON. EMR | 2.12 |
| PHYSICAL ED. TEACHER OF SECON. EMR | 2.83 |
| INDUSTRIAL ED. TEACHER OF SECON. EMR | 2.12 |
| TEACHER OF O.H. - ELEMENTARY | 10.34 |
| TEACHER OF O.H. - SECONDARY | 2.68 |
| AIDE FOR O.H. - ELEMENTARY | 7.91 |
| AIDE FOR O.H. - SECONDARY | 1.64 |
| PHYS. THERAPIST FOR O.H. - | 2.44 |
| PHYS. THERAPIST FOR O.H. - SECON. | .33 |
| OCCUP. THERAPIST FOR O.H. - ELEM. | 2.74 |
| OCCUP. THERAPIST FOR O.H. - SECON. | .29 |
| TEACHER OF V.H. - ELEMENTARY | 3.77 |
| TEACHER OF V.H. - SECONDARY | 2.29 |
| TEACHER OF SPECIAL LEARNING DISABIL. | 11.90 |
| TEACHER OF AUD. IMP. - ELEM | 13.34 |

FIGURE 4. PROJECTED MANPOWER REQUIREMENTS

TABLE 4
COMPARISON OF 1968-69 TARGET GROUP POPULATIONS—PROJECTED VS ACTUAL

| Age | TMR |  | EMR |  | O.H. |  | V.H. |  | S.L.D. |  | A.I. |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Projected | Actual | Projected | Actual | Projected | Actual | Projected | Actual | Projected | Actual | Projected | Actual |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.92 | 8 |
| 6 | 28.16 | 33 | 50.22 | 58 | 12.32 | 10 | 3.62 | 3 | 4.66 | 5 | 24.65 | 36 |
| 7 | 35.44 | 36 | 83.84 | 82 | 17.54 | 17 | 4.80 | 7 | 16.29 | 21 | 33.52 | 23 |
| 8 | 39.44 | 33 | 110.95 | 101 | 20.17 | 20 | 5.67 | 4 | 25.33 | 31 | 32.93 | 31 |
| 9 | 36.70 | 36 | 131.83 | 127 | 19.48 | 22 | 7.40 | 3 | 30.00 | 29 | 34.96 | 32 |
| 10 | 29.78 | 32 | 144.37 | 154 | 22.27 | 25 | 4.80 | 8 | 27.25 | 14 | 24.85 | 24 |
| 11 | 35.03 | 39 | 160.21 | 174 | 18.26 | 15 | 5.96 | 6 | 15.60 | 19 | 15.84 | 14 |
| 12 | 32.30 | 31 | 177.15 | 170 | 14.63 | 13 | 3.99 | 3 | 10.92 | 9 | 20.53 | 20 |
| 13 | 22.83 | 18 | 186.51 | 173 | 9.71 | 10 | 3.42 | 2 | 1.68 | 3 | 14.26 | 19 |
| 14 | 36.03 | 32 | 181.41 | 169 | 8.97 | 8 | 6.19 | 5 | 0 | 1 | 11.58 | 15 |
| 15 | 20.90 | 21 | 156.46 | 152 | 5.55 | 3 | 3.33 | 3 | 0 | 0 | 13.87 | 8 |
| 16 | 24.15 | 30 | 121.25 | 127 | 3.72 | 1 | 2.66 | 5 | 0 | 0 | 9.86 | 11 |
| 17 | 18.09 | 19 | 102.78 | 127 | 3.87 | 4 | 2.32 | 2 | 0 | 0 | 8.20 | 10 |
| 18 | 11.19 | 8 | 69.66 | 75 | 4.65 | 5 | 1.81 | 3 | 0 | 0 | 5.60 | 11 |
| 19 | 10.91 | 10 | 26.45 | 20 | 2.28 | 1 | .26 | 0 | 0 | 0 | 2.88 | 2 |
| 20 | .62 | 0 | 3.06 | 0 | .43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |
| Pre-School | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30.58 | 44 |
| Elementary | 236.86 | 240 | 858.55 | 866 | 134.39 | 132 | 36.23 | 34 | 0 | 0 | 176.90 | 163 |
| Secondary | 144.72 | 138 | 847.58 | 843 | 29.48 | 22 | 19.98 | 20 | 0 | 0 | 52.00 | 57 |
| Ungraded | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 131.73 | 132 | 0 | 0 |

### TABLE 5
### COMPARISON OF 1968-69 MANPOWER REQUIREMENTS BASED ON PROJECTED ACTUAL VS PROJECTED DESIRED PERSONNEL/PUPIL CONTACTS

| Personnel Type | Manpower Requirements | |
|---|---|---|
| | Projected Actual | Projected Desired |
| Teacher of TMR - Elementary | 14.52 | 18.22 |
| Teacher of TMR - Secondary | 10.42 | 8.04 |
| Aid for TMR | 13.05 | 13.13 |
| Teacher of EMR - Elementary | 75.19 | 62.46 |
| PE teacher of EMR - Elementary | 1.23 | 2.44 |
| Language Development teacher of EMR - Elementary | 8.58 | 7.31 |
| Speech Therapist - EMR - Elementary | 2.39 | 16.24 |
| Teacher of EMR-SI - Elementary | 5.96 | 2.59 |
| Assistant for EMR-SI - Elementary | 2.86 | 1.29 |
| Teacher of EMR - Secondary | 50.15 | 65.20 |
| Driver Education teacher of EMR - Secondary | 1.00 | 6.14 |
| Vocational Home Economics teacher of EMR - Secondary | 1.74 | 2.12 |
| PE teacher of EMR - Secondary | 1.22 | 2.83 |
| Industrial Education teacher of EMR - Secondary | 1.76 | 2.12 |
| Teacher of OH - Elementary | 11.99 | 10.34 |
| Teacher of OH _ Secondary | 3.29 | 2.68 |
| Aide for OH - Elementary | 9.02 | 7.91 |
| Aide for OH - Secondary | 1.46 | 1.64 |
| Physical Therapist for OH - Elementary | 2.73 | 2.44 |
| Physical Therapist for OH - Secondary | .50 | .33 |
| Occupational Therapist for OH-Elementary | 3.25 | 2.74 |
| Occupational Therapist for OH - Secondary | .27 | .29 |
| Teacher of VH - Elementary | 3.01 | 3.77 |
| Teacher of VH - Secondary | 2.32 | 2.29 |
| Teacher of Special Learning Disabilities | 9.16 | 11.90 |
| Assistant for Special Learning Disabilities | 2.58 | 2.92 |
| Social Worker - SLD | .99 | .91 |
| Teacher of the Deaf - Pre-School | 3.59 | 4.63 |
| Teacher of the Deaf - Elementary | 11.70 | 13.34 |
| Assistant for Deaf - Pre-School | 1.78 | 2.32 |
| Assistant for Deaf - Elementary | 4.34 | 4.45 |
| Teacher of Deaf - Secondary | 1.68 | 1.37 |
| Hearing Clinician - Elementary | 7.29 | 6.16 |
| Hearing Clinician - Secondary | 1.82 | 2.93 |

## TASK 4—DEVELOP FORMAT FOR ANALYSIS OF STATE DATA DEVELOPMENT POTENTIAL

### Objectives

5.27 The primary purpose of developing the state analysis format was to ensure the completeness and compatibility of the analysis of the information flow in each state, during the visit and in the resulting written report. The format was also developed to assist the analyst in the organization and order of his activities while visiting each state. Another objective was to increase the analyst's awareness of possible limitations in each state to the development of particular data elements.

### Procedure

5.28 An outline was prepared for the analysts, indicating the definitions and suggested sequence of activities and alternatives within those activities. Briefly, the outline directed the analyst to

a. Review materials received from the state so as to become as familiar as possible with their definitions, programs, organization, etc.

b. Explain the purpose of his visit to the administrator of the state special education agency; discuss with the administrator the advantages of improved information flow, including the ability to use more sophisticated management tools for planning purposes; and discuss with and motivate the administrator to use the MRPM as a tool.

c. Discuss the organization of responsibility for special education and the current information flow, including interagency flow, with the staff of the state special education agency and of any other agency having the responsibility for educating a portion of the handicapped child population.

d. Analyze the current status of the special education information system.

    1. Analyze current reports received from the LEA or other state agencies in terms of their frequency, content (data elements), format, and data source

    2. Evaluate current methods of processing information and preparing output reports

    3. Analyze current output reports in terms of function, content, format, and frequency.

e. Analyze the development potential of needed data elements.

    1. Determine the existence and availability of detailed data elements to be included in the special education information system

    2. Determine the potential data sources.

f. Determine the kind and amount of data processing (manual and automatic) support activities available for the development of a more detailed special education information system.

g. Develop at least one written description of an information system needed to support the MRPM and other state planning and evaluating functions.

    1. Analyze new information flow requirements in terms of frequency, methods of transmitting data, new or modified report contents and formats, and data sources

    2. Analyze data processing requirements of the recommended special education information system

    3. Summarize the design of the recommended information flow and the associated special education information system

    4. Discuss potential non-model uses for the data elements contained in the recommended system

    5. Evaluate, in terms of manpower and equipment, the additional resources required by the state to implement the recommended information system.

h. Collect and record in the questionnaire special education data that is currently available.

i. Discuss findings and initial system development description with the administrator of the state special education agency.

Figure 5, which displays the alternatives within the primary data development activities as they are related to possible limitations to the data development, was also prepared for the analyst to assist him in performing activities 5-7 listed above.

5.29 Additionally, several staff meetings of the analysts were held to discuss the activity outline and the possible situations that the analyst could encounter during the course of his state visits, and to develop relatively standard answers to questions that would probably be asked of him. In order to test the state analysis format, the initial two state visits were made by four analysts working as a team; this allowed each analyst to gain confidence in the validity and applicability of the developed format.

### Results

5.30 Assisted by the state analysis format, each analyst was able to conduct a set of complete, efficient state visits, knowing that his analyses were compatible not only within the states that he visited but also with the analyses performed by other analysts.

## TASK 5—SCHEDULE AND ARRANGE ON-SITE VISITS

### Objective

5.31 The objective of this task was to plan carefully the on-site visits to the states so that excessive costs could be avoided and effective performance could be maintained by the survey team.

### Procedure

5.32 The chain of events followed in accomplishing this task was as follows:

a. A letter was mailed from the Associate Commissioner, Bureau of Education for the Handicapped, to the principal education officer in each state, with a copy to the special education director. This letter briefly explained the objectives of the survey, introduced the contractor, and solicited the state's cooperation in the study effort. These letters were mailed in late July and August 1969.

b. At the same time, preliminary schedules for visiting the states were prepared. These preliminary schedules were developed to ensure project efficiency and to minimize the time staff members would spend "on the road." The basic arrangement, with the exception of states near the contractor headquarters, was to schedule one staff analyst to visit each state for a

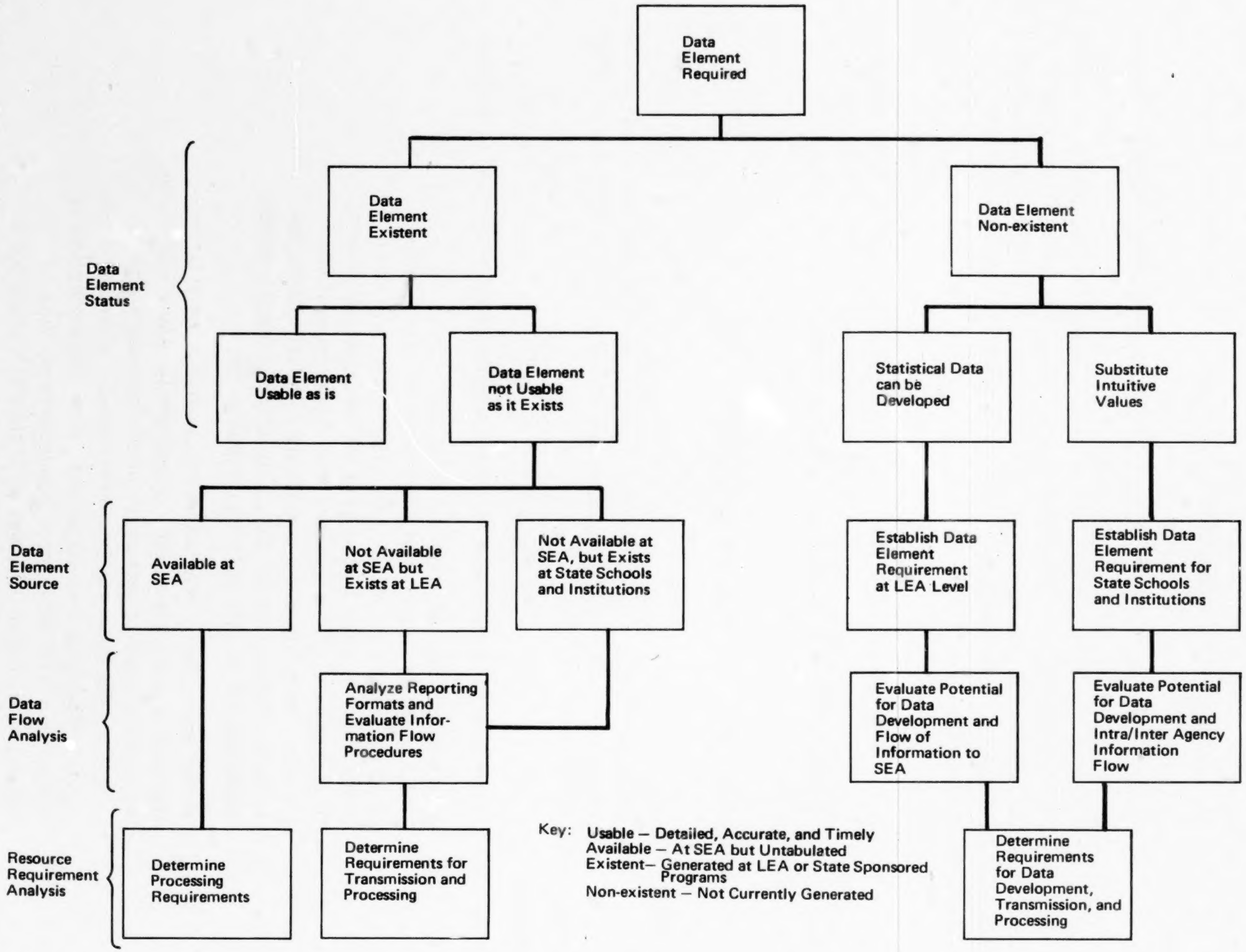
Data Element Required
Data Element Existent
Data Element Non-existent
Data Element Status
Data Element Usable as is
Data Element not Usable as it Exists
Statistical Data can be Developed
Substitute Intuitive Values
Data Element Source
Available at SEA
Not Available at SEA but Exists at LEA
Not Available at SEA, but Exists at State Schools and Institutions
Establish Data Element Requirement at LEA Level
Establish Data Element Requirement for State Schools and Institutions
Data Flow Analysis
Analyze Reporting Formats and Evaluate Information Flow Procedures
Evaluate Potential for Data Development and Flow of Information to SEA
Evaluate Potential for Data Development and Intra/Inter Agency Information Flow
Resource Requirement Analysis
Determine Processing Requirements
Determine Requirements for Transmission and Processing
Determine Requirements for Data Development, Transmission, and Processing
Key: Usable – Detailed, Accurate, and Timely
Available – At SEA but Untabulated
Existent– Generated at LEA or State Sponsored Programs
Non-existent – Not Currently Generated

FIGURE 5. PROCEDURE FOR ANALYSIS OF STATUS AND DEVELOPMENT OF A DATA ELEMENT

maximum of 5 days. To reduce travel expenses, states were paired permitting the staff analyst to visit two states in a single trip. A one week pause was scheduled between each two weeks of travel to permit the staff member to consolidate his notes and outline his final report while the results of the visit were still fresh in his mind.

c. Within a reasonable period after the mailing of Associate Commissioner's letter (usually 2 to 5 weeks), the staff member contacted the principal education officer by telephone and/or the special education officer in the states he was scheduled to visit. He again reviewed the survey objectives and answered any questions that may have been asked. A tentative survey schedule date was suggested by the staff member, and a mutually agreeable schedule date was established.

d. A letter of confirmation of the scheduled survey date and a more detailed written explanation of the model and its objectives were then mailed out. (Initially the questionnaire that was used to collect current enrollment data was also forwarded; however, after a few visits it was determined that the advance questionnaire caused some misunderstandings or became misplaced, and this procedure was discontinued.)

Results

5.33 These measures produced several benefits. Rapport was established between the state director and the contractor even before the actual visit. In addition, very few scheduling difficulties were encountered. Some reshuffling was necessary, at the states' request, but conflicts were avoided with only a minor effect on the schedule for completion of the survey task. Travel was less expensive as a result of the state-pairing method.

5.34 A problem did arise, however, which contributed to scheduling difficulties and caused an extension of the survey time frame. The delay in the Bureau of Budget approval of the questionnaire delayed the starting time for portions of the survey by 4 or 5 weeks.

## TASK 6—CONDUCT ON-SITE VISITS TO STATE SPECIAL EDUCATION AGENCIES

### Objective

5.35 The purpose of the survey was to review and analyze the capability and potential for utilization of the MRPM by the state agencies responsible for the education of handicapped children. The survey included an analysis of:

a. The capability of existing information flow processes to provide the necessary model input data

b. The existing automatic data processing capability to process the model program

c. The special education staff capability and desire to utilize the model.

Procedure

5.36 The state visits usually proceeded through four phases: (1) the explanation of the model application, (2) the collection of currently available data, (3) the analysis of the existing special education information flow, and (4) assessment of the state capability to utilize the model.

5.37 The explanation of the model application was usually made to the special education director and, when possible, his staff and other agency heads who participate in the education of handicapped children. This discussion was directed at presenting the concepts of the model and the advantages of its utilization and evaluating the degree of understanding and acceptance of the model concept. It was not unusual for the survey staff member to give this explanation several times because of the difficulty of assembling all the appropriate personnel at one appointed time.

5.38 The data collection phase was not always distinguishable from the analysis of information flow activity. Frequently, while endeavoring to collect data through interviews with knowledgeable personnel, through the examination of reports, and through the extraction of data from records, some valuable knowledge was obtained about data sources, levels of information, and information flow.

5.39 However, the prime consideration of the data collection effort was to obtain data which could be used to calculate present manpower requirements. A questionnaire was developed for recording the following data:

a. Age ranges by handicap group and education level

b. Identification of the special education programs

c. Enrollment by handicap group, education level, and education program

d. Number of children diagnosed as needing but not receiving services

e. Number of children referred and waiting for diagnosis

f. Number of children from e. above expected to need special education

g. Number of handicapped children not referred for diagnosis but believed to exist

h. Personnel/pupil contact ratios by handicap group, education level, and education program

i. Personnel employed by handicap group, education level, occupation, and employee education

j. Personnel not in direct contact with handicapped children

k. Unfilled direct contact positions for special education.

5.40 This information was sought from the special education agency and any other agencies that had a responsibility for the education of the handicapped. As described in Section III, certain limitations occurred which affected the extent to which some of the survey objectives could be accomplished.

5.41 Aside from the information developed while collecting data, the analysis of the existing data flow included:

a. Review of the content, originating source, and utilization of existing forms

b. Review of the present use of automated data processing, its availability for application to special education information systems, and its capability to process MRPM programs

c. Interviews with cognizant special education personnel regarding factors which could affect the development of the model data elements

d. Interviews with other agencies to determine their handicapped child educational responsibilities, their flow of information, and their willingness to cooperate with the state special education agency in the development of an overall handicapped child data base.

5.42 The assessment of the states' capability to utilize the model was an on-going process throughout the visit. Attitudes, manpower skills and availability, the status of the existing information flow, and organizational and legislative influences are all factors which were considered in this assessment.

## Results

5.43 As a result of the visits to the states by members of the survey team, and because of the excellent cooperation received from the state staffs, it was possible to realize several benefits from the visits. Many states became aware of the need for additional data and have initiated studies to improve the information flow. The visits provided motivation for upgrading information requirements by identifying the uses and applications of the MRPM. As a direct result of conversations during the survey visits, 12 states have begun the collection of model data elements. Other states, before beginning detailed consideration of implementation steps, are awaiting state analysis recommendations, the model use instruction guide, and the model computer program.

5.44 The major tangible result of the state survey visits was the derivation of recommendations to implement an improved information flow that would provide the states with additional management information and also supply the data elements necessary to the implementation of the model for manpower projection. An estimate of the extent of assistance required to implement and maintain the information flow has also been prepared. These recommendations are presented in individual state analysis reports contained in Part D of this report.

5.45 The data collection effort did not produce data of the quality desired, because data was frequently not available, or if available, was not easily accessible at state levels. Age ranges by handicap group and education level were usually available, although in the case of some handicap conditions (TMR, and emotionally disturbed, for example), the age/level structure was artificial. Forty states were able to define the age ranges of their handicapped groups by education level.

5.46 Special education programs as such were not always definable in the state's educational structure. Residential and itinerant (including homebound instruction) programs were easily identifiable, but more subtle graduations were more difficult to distinguish. Twenty-eight states were able to identify their special education efforts by education program.

5.47 Aggregate enrollment data by handicap group was usually available for the public school system. For other state agencies, it was more difficult to obtain, unless each agency or institution was individually contacted. Private school data was rarely available, except where program approval was required or tuition publically funded. Breakdowns of enrollment data by education level and education program were occasionally available. Within these limitations, data representing enrollment by handicap group was almost completely available in 25 states and partially available in 18 more.

5.48 Data on the number of children on special education waiting lists was not usually available, and when available, the degree of confidence in its completeness was low. Usually, if waiting lists were maintained at the local level, this data was not transmitted to the state level.

5.49 Data on the number of children referred and waiting for diagnosis, the number of those children expected to need special education, and number of children not referred but believed to exist was practically non-existent, except as created by the application of prevalence rates to the general education enrollment. In most cases, the prevalence rates applied were the national rates or modifications thereof.

5.50 Personnel/pupil contact ratios were usually available. Some states have more refined ratios than others, but the general level of definition included ratios by handicap group. Thirty-six states had personnel/pupil contact ratios for each of their handicap groups, and 12 more had ratios for just their major handicap groups.

5.51 Personnel employment data by handicap group/occupation was not too reliable. Seldom was this data available by reference to a statistical listing. It was usually obtained by a review of state special education directories, classroom reporting forms, or an interpretation of related statistical data. As in the case of enrollment data, employment numbers from other state agencies or private schools was most difficult to obtain within the survey time frame. Information on employee education level was most incomplete, and when available, it usually came from an automated personnel data file printout. Only 26 states had reasonably complete data on numbers of special education personnel employed, while 16 more states had partial employment data.

5.52 Counts of personnel not in direct contact with handicapped children and counts of unfilled direct contact positions were data elements to which the state special education agencies could seldom respond because of lack of data from the local level. The data that was collected was extremely sketchy.

5.53 The effort to collect the foregoing data, while not as successful as anticipated, did contribute significantly to the other survey objectives however. The search for data revealed many of the data gaps and shortcomings in the basic information flow.

## TASK 7—PREPARE STATE ANALYSES

### Objective

5.54 The purpose of the state analyses was to formulate statements of data development potential in each of the states. Each analysis essentially involved the examination of the nature of available data, identification of data gaps, and preparation of reports on probable means for data development.

### Procedure

5.55 Each survey staff member prepared a state analysis report for each state he visited. The format for this report is briefly outlined below.

I. Introduction — A brief review of the purpose of the MRPM and the objectives of the state survey.

II. Summary — A short statement of the findings and recommendations contained in the report.

III. Responsibilities for Special Education — A review of the state level organizational structure as it pertains to those agencies that have responsibilities for the education of handicapped children. This section provides an overview of the interagency complexities which may affect a unified handicapped child information flow.

IV. Data Element Evaluation — An element by element evaluation of the current availability of those data elements necessary to the full application of the MRPM. The current data status, a determination of missing elements, an examination of reporting formats, and suggestions concerning missing data sources are discussed as they affect each data element.

V. Processing Potential — An analysis of the computer hardware capability to process the MRPM computer program and the potential availability of the computer for special education use. Personnel capability to prepare inputs and utilize model outputs is also evaluated.

VI. Additional Factors — This section contains a brief discussion of those factors, exclusive of data element availability, which can influence the implementation potential. This may include organizational, fiscal, legislative, or political considerations.

VII. Recommendations — The data availability having been evaluated, the data gaps identified, and the processing potential determined, recommendations are presented not only for the development of specific data element information but also for general improvement of the existing information flows.

VIII. Resource Requirements —An estimate is made of the manpower resources required both to implement and maintain an information flow capable of supporting the model. The implementation time frame is also estimated.

IX. Persons Interviewed — A list of the people interviewed during the survey visit.

5.56 Upon completion of the report draft, a copy was sent to the state special education director by registered mail with a copy to the state's chief education officer. Review by state special education personnel was encouraged, and it was requested that inaccuracies or other comments be noted and returned to the contractor. If no corrections were necessary, or if the state desired to make no comment, it was requested that receipt and review be acknowledged. This procedure was followed in an effort to eliminate inaccuracies, errors, or misunderstandings prior to finalization and publication of the report.

5.57 Upon receipt of comment from the state, the author corrected errors and evaluated the comments. If they were pertinent to the content, the comments were incorporated in the report.

### Results

5.58 The response to the drafts of the state analysis reports indicated that the intent and content of the reports were well received. Many positive comments were received on the utility of the report as a guide to improving state information systems. Some states welcomed the report from an independent source as a means of reinforcing their need for improved information. Some errors were discovered and corrected. Several report updates were required as a result of information flow actions taken by states and reported to the contractor subsequent to the state survey visit. The reports therefore reflect the status of each state's special education system at the time of this Phase III report preparation, insofar as the state has reported it to the contractor. It was obvious that some states were immediately responsive to the study by beginning to take, or continuing to take, positive action to improve their special education information flows. Thirty-six of the states responded to the report by mail or telephone, and only one state was negative in its comment.

## TASK 8—ESTIMATE STATE REQUIREMENTS

### Objective

5.59 The objective of this task was to prepare estimates of current manpower requirements in accordance with available data. If the data available was adequate, an estimate of the nationwide special education manpower could be compiled.

### Procedure

5.60 The data collected in Task 6 was used as a basis for the calculation of current manpower requirement estimates. Those specific data elements necessary to this calculation were:

a. Enrollments, plus waiting lists when data were available, by handicap group, education level, and education program

b. Personnel/pupil contact ratios, by handicap group, education level, and education program.

5.61 The personnel/pupil ratios were applied to the appropriate handicap group population enrollment data and the estimated personnel requirements were calculated. For example, a population of 3,268 EMR with a personnel/pupil ration of one teacher to 12 children yields an estimated requirement for 272 teachers of the educable mentally retarded. However, because of the lack of waiting list data, most of the calculations were based on the enrolled population and are, as a consequence, underestimations of the personnel requirements.

### Results

5.62 As indicated in the discussion of the results of the data collection effort, the basis for the calculation of the estimated manpower requirements is not as satisfactory as was desired. The estimations are tabulated and compared with actual employment data in the tables contained in Part A, Appendix 1, of this report.

## TASK 9—ESTIMATE MANPOWER SUPPLIES

### Objective

5.63 The purpose of this task was to record the current supply of special education manpower on a state-by-state basis to the extent permitted by available data.

### Procedure

5.64 This task was performed in conjunction with the data collection procedure described in Task 6.

### Results

5.65 The results of this task are also discussed in Task 6, and the tabulated results are contained in Part A, Appendix 1, of this report.

## TASK 10—DEVELOP REQUIREMENTS AND METHODS FOR STATE REPORTING OF MODEL RESULTS

### Objective

5.66 Since the primary purpose for the development of the Manpower Requirements Projection Model was to enable BEH to obtain estimates of special education manpower requirements, the objective of this task was to outline the procedures whereby BEH would receive the estimates produced by the MRPM.

Procedure

5.67 Ideally, BEH should receive a yearly estimate of manpower requirements from each state. Practically, however, some states may not apply the model at all and some may choose to apply it infrequently; thus, the only procedure outlined was for the transmission of a copy of the REQMODEL program output from a state to BEH.

5.68 A statement, suggesting to each state that a copy of the REQMODEL program output be sent (on a voluntary basis until it is made mandatory) to the Division of Training Programs, BEH-OE, HEW, is included in Section VII, page B44, of the Special Education Staff Users Guide (Part B of this report) and in Section II, page C-2, of the MRPM-Technical Documentation of the Computer Program (Part C of this report).

Results

5.69 Although the methods for the state reporting of MRPM results have been outlined, any description of the results must await the initial transmissions.

## TASK 11—ESTIMATE TEACHER TRAINER REQUIREMENTS

Objective

5.70 The purpose of this task was to demonstrate the capability and validity of the Teacher Trainer Model presented in Section IV of the Phase I Report[2/] using actual data or data determined by one or more experts in the field of special education manpower training.

Procedure

5.71 The theory of the Teacher Trainer Model was demonstrated in Phase I by using simulated data to demonstrate the following options:

> Option 1. Calculation of the teacher trainer requirements on the basis of a specified number of required enrollments.
>
> Option 2. Calculation of teacher trainer requirements on the basis of a given number of students who require educational services and a conception of a model program area in terms of numbers of faculty.
>
> Option 3. Calculation of the teacher trainer requirements on the basis of a program area defined in terms of a maximum number of enrollments.

5.72 The concept of the model as presented in the Phase I Report has been reviewed and the contractor has confirmed the theoretical validity of the model. Adequate data for actual testing was not available during the scheduled time frame and constraints of this phase of the contract.

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[2/] B.G. Bruce, M.J. Allard, B.A. Johns, F.L. McCoy, Study of the Need for Educational Manpower for Handicapped Children and Youth-Phase I Report, 13 December 1968.

Results

5.73 Although actual data has not been applied to this model, the logic has been demonstrated using the simulated data. It is suggested that BEH develop actual input data from ongoing programs as a further test of the model applicability.

## TASK 12—ESTIMATE RESEARCH REQUIREMENTS

Objective

5.74 The purpose of this task was to develop and demonstrate a model to project special education research personnel requirements.

Procedure

5.75 Previous attempts (described in the Phase I Report[3]) to develop a model to project special education research personnel requirements were reviewed jointly by representatives of BEH and ORI. In addition, joint discussions about the problems involved were held and further attempts were made to formulate a straightforward relationship between research expenditure levels and research personnel requirements.

Results

5.76 The conclusion reached was that a model to project special education research personnel requirements would be very complicated and difficult to develop. In essence, it would have to be a large scale simulation model that could acount for (a) the categorization of different types of research, (b) the different types of research personnel (including their degree level) required for various types of research, and (c) the relationship of numbers of researchers required for various levels of funding. Thus this task is recommended for further action by BEH.

## VOLUNTARY TASKS

Objectives

5.77 The purpose of the first voluntary task was to determine the attitude of each state special education agency toward collecting employee motivation information from local education agencies and other state education agencies employing special education personnel.

5.78 The purpose of the second voluntary task was to determine what type of financial assistance (similar to PL 85-926) each state offers to train special educators.

Procedure

5.79 During the course of each state visit, the analyst discussed the voluntary tasks with the administrator of the state special education agency and with some local agency personnel. When discussing the first task, the analyst suggested the use of standardized entrance and exit interview formats, a copy of which could be sent to the state agency for compilation if the local or other state agency did not want to tabulate such data for their own use. For the second task, state assistance was defined as funds contained in the state education agency's budget that are to be used specifically to train special educators, rather than funds available to train all educators.

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[3] Ibid.

Results

5.80 Almost all the state level administrators of special education were in favor of collecting employee motivation information such as (a) reason for entering or leaving the field of special education, (b) previous or subsequent employment occupation, (c) source of new entrance or destination if leaving, and (d) employee availability for full or part-time work in the future. Since many of the local education agencies and other state agencies already conduct entrance and exit interviews in which they collect similar types of information, it should not be difficult for BEH to suggest a standard format or the basic framework of one.

5.81 Few states offered their own financial assistance to train special educators. The following is a list of the states that do offer assistance and the description of their programs, as discussed with each analyst during his visit to the state.

- Alabama. One of the functions of the Program for Exceptional Children and Youth is to administer the state's in-service special education training program and PL 85-926 for special education trainees. No other information was given to the analyst.
- California. At present, the state provides grants for summer scholarships to special education teachers working toward clearing their credential. The limitations are that the maximum reimbursement rate is \$50/unit, that the recipient must have been employed as a teacher in the state the previous year and must contract to teach special education in the fall, and that teachers of the Emotionally Handicapped are not eligible. During 1969, 6,875 grants were awarded.

  For 1971, the state hopes to upgrade the program to include teachers of the Emotionally Handicapped, to include special education teachers who wish to upgrade their skills, to allow grants of up to \$50/unit for a maximum of 5 years, and to consider the grants as a loan, which the teacher may repay by working 1 year for each summer for which he received funds, beginning immediately after the summer (or the last summer if the teacher is also in full-time training during the academic year) for which funds were granted.

- Delaware. The state provides scholarships in the fields of medicine, law, and special education (at the undergraduate and graduate levels) for Delaware residents attending college outside the state (because of the limited capacity of the state university). In addition, the University of Delaware offers scholarships to teachers of the mentally retarded and other special education teachers for graduate level study, and offers a tuition-free (the only charge is $10/person for room and board) summer course for special education teachers.

- Florida. Three scholarship programs are conducted, using state funds. The first, instituted in 1968-69, is for college juniors or seniors who are majoring in Special Education. The funds granted to these students, $600/year, are considered as a loan which may be repaid in cash (through the standard loan procedure) or by working in the field of special education in the state for 1 year for each year of funds granted. During the first year of operation, this program funded 69 persons. For a teacher who is working in special education but is not yet certified, the second program provides reimbursement of the costs for courses required for certification. During the 1968-69 academic year, 553 of these scholarships were awarded. The third program grants up to $60/quarter hour or $80/semester hour to certified special education teachers who attend summer sessions to obtain advanced training. During the summer of 1969, 65 teachers received funds.

- Illinois. When the mandate to place all diagnosed children in special education was introduced in 1965, a program was initiated to provide scholarships for the training of special education personnel.

- Ohio. Up to $45,000 of state financial aid is available for special education teacher training.

- Virginia. State aid is provided to non-endorsed teachers (teachers who are certifed in regular education but not endorsed in a special education field) for tuition costs incurred while they are working toward special education endorsement. This aid is limited to $20/semester hour.

- West Virginia. The state has proposed that $116,000 be made available, beginning July 1970, for the retraining of regular teachers to become special education teachers. The funds in this proposed program would provide either for traineeships at a college or university or for extension service from a college or university.

# VI. RECOMMENDED FURTHER ACTIONS

6.1 The submission of this Phase III report represents the completion of contractor efforts in the development of the Manpower Requirements Projection Model and the analysis of the status and potential of information availability in the states. The overall reaction of the states to utilization of the model and establishment of the necessary flow of information has been favorable, but considerable additional effort is necessary if the initial interest and motivation are to be utilized by BEH in implementing the use of the MRPM. This section presents recommendations for BEH actions considered appropriate to implementation of the current findings. It also presents recommendations for further related research intended to build upon the concepts developed in this study, as a means of further improving BEH capability to perform its overall responsibilities in education for the handicapped.

## IMPLEMENTATION OF THE MANPOWER REQUIREMENTS PROJECTION MODEL

6.2 Part B of this report, the Special Education Staff Users' Guide, provides a description of the purpose and benefits of the MRPM, requisite data elements, general method of operation, and steps necessary for development and implementation. This material is presented in a non-technical context so that it can be most readily utilized by the special education administrator or staff personnel responsible for decisions regarding adoption and utilization of the MRPM within a state. Additional technical documentation regarding the computer program is presented in Part C for those individuals specifically responsible for this aspect of the model. Taken together, these two documents provide all of the written guidance and technical descriptions necessary for independent implementation of the model by each state.

6.3 However, given 50 disparate special education agencies, different in environment, experience, capability, and resources, it would be highly optimistic to expect implementation to occur readily and efficiently on the basis of written documentation only, no matter how complete and persuasive that documentation might be. For this reason, it is suggested that BEH consider the following actions as means of encouraging and ensuring the implementation of the model in the most appropriate and effective manner.

State Implementation Demonstration

6.4 As noted previously in this report, the validity of the model formulation and the feasibility of its use by state special education agencies were demonstrated during the earlier stages of Phase III. The results of this demonstration were discussed with the individual state personnel during the state visits and were generally accepted as an indication of the validity of the model. The applications and advantages of the model also were discussed with the state personnel; the discussions generally produced an appreciation of the benefits of model implementation.

6.5 It is important to note, however, that the scope of this study did not permit a test at the state level, i.e., using state data and under the observation of state personnel. As a result, state agencies do not have an example of model implementation that they can directly correlate with their own needs or environments. Furthermore, a one-time test of a system using historical data is not as informative or convincing as an actual extended application using current data. For these reasons, it is recommended that a state-level demonstration of the model be performed in order to present more convincingly the advantages of the MRPM to the individual states. At the same time, this demonstration will permit the identification and correction of minor problems that might arise in an actual implementation effort at the state level. In brief, such a demonstration would

a. Provide an example of model application as an increased incentive for application by other states.

b. Permit evaluation of the actual time frame and costs of implementation as compared to these estimated in this report.

c. Provide guidance to subsequent states regarding the approaches and possible pitfalls related to development of the information flow procedures necessary for support of the model.

6.6 A number of criteria may be considered by BEH in selecting or proposing the state (or states) for the demonstration. In general, since at least partial funding by BEH is anticipated, one of the criteria might be the overall cost of the demonstration effort. A second criterion would be the availability of data at the state level, in order to provide results within a reasonable period. That is, for demonstration purposes, it would be wise to choose a state in which results can be shown in 1 year rather than 2 or 3 years, as might be the case in states requiring considerable improvement in the availability of data. Data availability is presumably the most stringent determinant of the time required to demonstrate the model, since other resources (e.g., personnel or ADP support) could be provided, for the period of the demonstration, by some special means.

6.7 Prerequisite to the selection of a demonstration state are the interest, concurrence, and cooperation of the state special education agency staff, as well as of those in other elements of the state education agency that might be involved. In addition, it would be preferable (a) that the state not have too large a population, since this adds excessive data volume not relevant to the demonstration; (b) that it have a well-established state educational organization so as to minimize the number of locals that must be involved in the demonstration; (c) that it have an active and comprehensive reporting system between local and state special education agencies; and (d) that it have no legislation that would constrain the identification of the handicapped child population beyond those numbers that the state has the capability to serve, as this constraint poses an arbitrary restriction hampering the application of the model findings.

6.8 Based on the state analyses performed in this study, it should be possible for BEH to identify states having these characteristics. Actual conduct of a state demonstration, therefore, is primarily dependent on the extent to which BEH wishes to motivate and support the demonstration, rather than on the availability of eligible states.

### Regional Implementation Workshops

6.9 As noted previously, much was done during the state visits to develop an interest in each state in the improvement of its special education information system and in implementation of the model. The individual state analysis reports provided in Part D, and the users' guide and technical documentation provided in Parts B and C, are further extensions of this effort to encourage use of the model by the states. However, while these efforts set the stage for implementation by providing acceptance of the MRPM concepts and presenting the basic working tools, the actual initiation of the implementation effort in most states will require more direct contact with, and guidance to, those state personnel directly responsible for the implementation decision and the subsequent implementation effort. Included among these personnel are several levels within the special education staff (e.g., the director, the handicap specialist, and the staff analyst responsible for implementation), as well as representatives of other state agencies responsible for either education of the handicapped or support to the special education staff with regard to data processing or similar assistance.

6.10 To provide this direct contact with state personnel, it is recommended that BEH sponsor and present regional implementation workshops or seminars designed to further familiarize the state special education staff, and others concerned, with the benefits and requirements of improved information flow and MRPM application.

These sessions should seek to involve the state personnel in the use of the system by encouraging discussion of the potential uses and possible problems specific to each state. BEH personnel can thus point out uses for MRPM and help to solve problems for each state, without the expense and time required for separate visits to each state.

6.11 BEH has utilized the regional workshop for other applications. The general approach for this application would be the same as that used previously. In this instance, the presentation could include the detailed explanation of the data requirements, the methodology for input to the model, the simulation potentials, and the interpretation of the output reports. Material provided in Parts B and C of this report can be used as the instructor's manual or textbook for the workshop. The workshops should also include a discussion of the sources of technical assistance available to the states, e.g., BEH, other states further advanced, or contractor support. The arrangements for obtaining this assistance can then be left to the individual states.

### BEH Support of State Activities

6.12 The state survey visits, and the subsequent opportunities afforded the states to review the drafts of their respective state analysis reports, have created an interest in information improvement in many states that has been made evident not only to the ORI staff but also to members of BEH. It is essential that BEH take advantage of the impetus provided by this interest by seeking additional means by which it can encourage and support information activities within the state special education agencies. These activities should not be confined to the MRPM and its supporting information system; rather, they should pertain to the collection and application of data for improved management of all state special education functions.

6.13 In addition to providing technical guidance and assistance to the states, as exemplified by the documentation in Parts B, C, and D of this report, or by implementation of the preceding recommendations, BEH must also point out to the states the sources of funding available to support their information efforts. In this regard, BEH should at least ensure that the states are aware that the portion of Title VI funds allocable to administration can also be applied to the development or improvement of the information flow or utilization within the state. Further assistance could be extended by BEH either through the provision of supplemental grants specifically for information development or through Federal sponsorship of research contracts intended to develop findings of potential application for all states.

## SUGGESTED FURTHER RESEARCH

6.14 One of the products of this study is the demonstration to the states of the benefits for special education management that may be obtained from an improved information flow and the use of planning tools such as the Manpower

Requirements Projection Model. This result illustrates the potential value to both Federal and state agencies of further research and development efforts related to the management of special education at the state level. There are, of course, several directions that such research might take; however, as a result of its direct contacts with the individual state special education agencies, ORI believes that Federally-sponsored research in the three areas discussed in the following paragraphs would be of significant value to the management and delivery of education for the handicapped.

Generalized Special Education Information Systems

6.15 The survey of state special education agencies demonstrated a strong need for improving the flow of information between local and state agencies and among various state agencies. Although such systems need not be complex or highly sophisticated, their design and implementation for each state may well require skills and resources beyond those readily available to the special education agency. Further, although each state agency is perhaps unique in its information requirements when considered in full detail, there are common characteristics among states that would permit the use by many states of one approach to satisfying an information requirement. In addition, only a slight modification of this basic approach might then permit it to be applied at several other states.

6.16 The above situation, i.e., a recognized need for improved information systems, a shortage in available resources, and a generally common set of information requirements and approaches, suggests that consideration be given to developing one system of general use to all users—that is, the design of a generalized special education information system that would provide each state with the basic mechanism for the functions of data collection, data manipulation, and output report preparation, but would still be sufficiently flexible in its structure so that individual variations in state requirements could be readily accommodated. In this respect, the system would be similar in concept to the Manpower Requirements Projection Model, which provides each state with the same data collection, computational, and reporting procedures, but also permits each state to maintain its individuality regarding target group definitions, contact ratios, and other data elements or projection requirements. At the same time, this generalized concept would avoid the obstacles encountered by many short-lived system development efforts requiring standardization among all users to comply with system capabilities and specifications.

6.17 It is therefore recommended that, as a first step, BEH perform a study to evaluate fully the feasibility, potential benefits, and costs of such generalized special education information systems. Two basic generalized systems appear initially advisable: (a) a pupil accounting system for use by those states that maintain individual pupil records at the state level and (b) a data summary system for the use of those states in which local agencies are required to submit only specified data summaries. The development of such generalized systems would have the advantages of

- Economy, because the development cost of the basic systems would not have to be repeated for each user.
- Encouraging states to upgrade their special education information systems, because of the availability of this additional assistance.
- Expediting MRPM implementation, because of the improved potential for the availability of the necessary supporting information flow.

Development of a Manpower Supply Model

6.18 The Manpower Requirements Projection Model developed in this study provides the state special education agency with the capability of projecting manpower needs by skill type and year of need. A companion manpower supply model would provide a similar capability for projection of available manpower to meet these needs. The utilization of both of these manpower planning tools would greatly assist the state special education director in the development of policies and practices necessary to match supply with demand. The information provided by the model for each state would also be useful at the national level in the evaluation of the needs and priorities of Federal programs designed to influence the supply of special education manpower. Effective use of the teacher trainer model developed in this study also would be enhanced by the availability of projections of manpower supply.

6.19 Preliminary work on this model was undertaken during this study, but the development of the model was hampered by the lack of sufficient information regarding motivational and mobility factors for special education students and practitioners. However, Phase IV of this current BEH study should provide additional information on these factors; this information may then be used as a basis for establishing supply parameters and determining their initial values. Completion of Phase IV may therefore make it feasible for BEH to conduct further research in the development of the manpower supply projection model.

Development of Diagnostic Capabilities

6.20 During the state visits it became obvious that very few states had diagnostic capabilities sufficient to identify most of the children in the state who should receive special education services. As a result, the true total special education service requirements in a state were seldom determinable except by estimation, and then generally by the use of national prevalence rates. Among the causes for this deficiency were the lack of funds for operating diagnostic facilities and paying qualified diagnostic personnel, and the lack of sufficient numbers of these trained personnel. BEH should consider the establishment of a cooperative program with other Federal agencies (e.g., PHS) and the appropriate state agencies, to initiate and support diagnostic centers that would perform both medical and educational diagnosis and thus would identify those children requiring special education assistance. A corollary requirement would be the development of a diagnostic reporting system that would report identified handicapped persons to appropriate state and local agencies (i.e., special education, health, vocational rehabilitation), so that the total identified handicapped child population may be considered when making plans to serve that handicapped population.

# APPENDIX 1

# STATE DATA SUMMARIES

## INTRODUCTION

1.1 One objective of the state survey was to collect data necessary for estimating current special education manpower requirements. A questionnaire was developed to collect this as well as other data to provide the Bureau of Education for the Handicapped with information pertaining to the unidentified handicapped child population, the educational background of special education employees, indirect contact personnel position, and unfilled direct contact positions. A format for recording this data as it was collected was developed by ORI and approved by the Bureau of the Budget.

## REVIEW OF DATA AVAILABILITY

1.2 The data collection effort did not produce all of the data desired, generally because data was frequently unavailable at state special education levels, or if available, was not easily accessible. Although previously discussed in the description of Task 6 results (Section V of this Part A), the availability of individual data elements may be summarized as follows:

a. Age ranges by handicap group and education level were usually available, although in the case of some handicap conditions (TMR and emotionally disturbed, for example), the age/level structure was artificial.

b. Special education programs as such were not always definable in the state's educational structure. Residential and itinerant (including homebound instruction) programs were easily identifiable, but more subtle gradations were more difficult to distinguish.

c. Aggregate enrollment data by handicap group was usually available for the public school system. For other state agencies,this data was more difficult to obtain unless each agency or institution was individually contacted. Private school data was rarely available, except where program approval was required by the State Special Education Agency and tuition was publicly funded. Breakdowns of enrollment data by education level and education program were occasionally available.

d. Data on the number of children on special education waiting lists was not usually available; when it was available, the degree of confidence in its completeness was low. Usually, if waiting lists were maintained at the local level, this data was not transmitted to the state level.

e. Data on the number of children referred and waiting for diagnosis, the number of those children expected to need special education, and number of children not referred but believed to exist was practically nonexistent except as created by the application of prevalence rates to the general education enrollment. In most cases, the prevalence rates applied were the national rates or modifications thereof.

f. Personnel/pupil contact ratios were usually available. Some states have more refined ratios than others, but the general level of definition included ratios by handicap group.

g. Personnel employment data by handicap group/occupation was not too reliable. This data was seldom available by reference to a statistical listing; instead, it was usually obtained by a review of state special education directories, classroom reporting forms, or an interpretation of related statistical data. As in the case of enrollment data, employment numbers from other state agencies or private schools were most difficult to obtain within the survey time frame. Information on employee education level was quite incomplete and, when available, it usually came from an automated personnel data file printout.

h. Counts of personnel not in direct contact with handicapped children and counts of unfilled direct contact positions were data elements to which the state special education agencies could seldom respond because of lack of data from the local level.

ESTIMATION OF CURRENT MANPOWER REQUIREMENTS

1.3 The data collected in Task 6 was used as a basis for the calculation of current manpower requirement estimates. Those specific data elements necessary to this calculation were:

a. Enrollments plus waiting lists when data was available, by handicap group, education level, and education program

b. Personnel/pupil contact ratios, by handicap group, education level, and education program.

1.4 The personnel/pupil ratios were applied to the appropriate handicap group population enrollment data and the estimated personnel requirements were calculated. These personnel estimates for each state are shown in the Special Education Personnel Estimation Requirements/Employment Comparison Table contained in this appendix.

STATE DATA SUMMARIES

1.5 The data that was collectible during the survey visit to state special education agencies is presented separately for each state in a series of tabulations in the following pages of this appendix. The content of each state set of tabulations is as follows:

a. Overview of Special Education Programs

This table contains a breakdown, by handicap category, of the age ranges for each of the education levels that the state recognizes. It also gives an indication by handicap category of the education program available in the state.

The Handicap Code shown in the left-hand column serves as a cross-reference between this table and the other tables that apply to each state, as well as to the tables of data for other states. Thus, for instance, H9 refers to the educable mentally retarded category for education level, education program enrollment, and personnel/pupil contact ratios within a state set of tables as well as to other states data.

b. Enrollments in Special Education

The tabulation presents the special education enrollment by handicap category, education level (when available), and education program. Any available waiting list data is also shown on this tabulation.

c. Personnel/Pupil Contact Ratios

This table shows, for each handicap category, the personnel/pupil contact ratios by education level (when available) for each occupation directly involved in the instruction of the children.

d. Special Education Personnel Estimated Requirements/ Employment Comparison

These tables show both actual employment and estimated requirements by special education occupation. An "x" in the column headed "Certified" indicates that the state has established formal special educational/ experience criteria that personnel must satisfy before they can be certified to perform that job function. A blank in this column indicates that the state has not acknowledged formally on special education certification requirements.

## LIMITATIONS TO THE CALCULATION OF ESTIMATES

1.6 Data, when available, was either entered by personnel education level or by total for each personnel type and education level served, depending upon the detail contained in the source material. The estimated employment was calculated only for total personnel by personnel type and education level served.

1.7 The calculation of personnel requirement estimates was based solely on the correlation of collected data. For example, if the enrollment in a handicap category was known by education level and the personnel/pupil contact ratio was known for that level, an estimate of manpower requirements by education level was made. If enrollment was known only by total handicap category and the personnel/pupil contact ratio applied only to the total category, an estimate for the total category was made. However, if enrollment was by total category and personnel/pupil contact ratios were provided for different education levels, no estimate was made, since it was not feasible to make an assumption as to the content of the total enrollment by education level.

1.8 Estimates have been calculated whenever possible, even though enrollment data was not complete. Such estimates are identified by footnote.

State Name: Alabama Overview of Special Education Programs Data Period 1968-1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) |  |  |  |  | Education Program |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Preschool | Elementary | Secondary | All Grades | Institution All Grades | Residential Special Class | Special Schools | Day Special Class | Cooperative Class | Resource Room | Itinerant |
| H-1 | Blind |  | 6-12 | 13-21 | 6-21 |  | X |  | X |  | X |  |
| H-2 | Partially Sighted |  | 6-12 | 13-21 | 6-21 |  |  |  | X |  | X |  |
| H-3 | Visually Handicapped |  |  |  |  |  |  |  |  |  |  |  |
| H-4 | Deaf | 3-5 | 6-12 | 13-21 | 6-21 | 6-23 | X |  | X |  |  |  |
| H-5 | Hard of Hearing | 3-5 | 6-12 | 13-21 | 6-21 |  |  |  | X |  |  |  |
| H-6 | Hearing Handicapped |  |  |  |  |  |  |  |  |  |  |  |
| H-7 | Emotionally Disturbed | 3-5 | 6-12 | 13-21 |  |  |  |  | X |  | X |  |
| H-8 | Mentally Retarded |  |  |  |  |  |  |  |  |  |  |  |
| H-9 | EMR |  | 6-12 | 13-21 | 4-26 |  | X | X | X | X |  |  |
| H-10 | TMR |  | 6-12 | 13-21 | 5-26 | 4-21 | X | X | X |  |  |  |
| H-11 | MR (Custodial, Severe, Institutional) |  |  |  |  |  |  |  |  |  |  |  |
| H-12 | Speech Handicaps |  |  |  |  | 6-21 |  |  |  |  |  | X |
| H-13 | Speech and Hearing |  |  |  |  |  |  |  |  |  |  |  |
| H-14 | Special Learning Disabilities |  |  |  |  | 6-21 |  |  | X | X | X |  |
| H-15 | Brain Injured |  |  |  |  |  |  |  |  |  |  |  |
| H-16 | Physically Handicapped |  |  |  |  | 6-21 |  |  | X |  |  | X |
| H-17 | Homebound |  |  |  |  | 6-21 |  |  |  |  |  | X |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

1/ If no entry is shown, category is not applicable to the state

Alabama

State Name: Alabama Enrollments In Special Education Data Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Special Schools | Day Special Class | Itinerant | Estimates of Believed To Exist | |
| H1 | Blind | Elementary | | | 8 | | 901 | |
| | | Unspecified | 202 | | | | | |
| H2 | Partially Sighted | Elementary | | | 30 | | | |
| H4 | Deaf | Elementary | 396 | | 32 | | 5406 | 51 * |
| | | Secondary | 55 | | 32 | | | |
| H5 | Hard of Hearing | Elementary | | | 14 | | | |
| | | Secondary | | | 14 | | | |
| H7 | Emotionally Disturbed | Elementary | | | 26 | | 18020 | |
| H9 | Educable Mentally Retarded | Preschool | | 27 | | | | |
| | | Elementary | | 227 | 4130 | | | |
| | | Secondary | | 88 | 1806 | | | |
| | | Unspecified | 304 | | | | 18020 | 200 * |
| H10 | Trainable Mentally Retarded | Elementary | | | 420 | | 2703 | |
| | | Secondary | | | 240 | | | |
| H12 | Speech Handicaps | Unspecified | | | | 9000 | 31535 | |
| H14 | Special Learning Disabilities | Unspecified | | | 50 | | 9010 | |
| H16 | Physically Handicapped | Unspecified | | | 266 | | 4505 | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

* Data for institutions only

State Name: Alabama Personnel/Pupil Contact Ratio Data Period 1968 - 1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types: Residential Special Class | Special Schools | Day Special Class | Cooperative Special Class | Resource Room | Itinerant |
|---|---|---|---|---|---|---|---|---|---|
| H1 | Blind | Teacher | Elementary | 1/5 | | 1/8 | | | |
| | | | Secondary | 1/15 | | 1/12 | | 1/12 | |
| H2 | Partially Sighted | Teacher | Elementary | | | 1/10 | | | |
| | | | Secondary | | | 1/15 | | | |
| H4 | Deaf | Teacher (Deaf and Severely Hard of Hearing) | Preschool | | | 1/5 | | | |
| | | | Elementary | 1/8 | | 1/8 | | | |
| | | | Secondary | 1/8 | | 1/12 | | | |
| H5 | Hard of Hearing | Teacher (Deaf and Severely Hard of Hearing) | Preschool | | | 1/8 | | | |
| | | | Elementary | | | 1/10 | | | |
| | | | Secondary | | | 1/15 | | | |
| H7 | Emotionally Disturbed | Teacher | Preschool | | | 1/5 | | | |
| | | | Elementary | | | 1/6 | | 1/10 | |
| | | | Secondary | | | 1/8 | | 1/12 | |
| H9 | Educable Mentally Retarded | Teacher (Mentally Retarded) | Elementary | 1/10 | 1/15 | 1/10 | | | |
| | | | Secondary | 1/10 | 1/15 | 1/10 | 1/15 | | |
| H10 | Trainable Mentally Retarded | Teacher (Mentally Retarded) | Elementary | 1/10 | 1/10 | 1/10 | | | |
| | | | Secondary | 1/10 | 1/10 | 1/10 | | | |
| H12 | Speech Handicaps | Speech Therapist | All Grades | | | | | | 1/75 |
| H14 | Special Learning Disabilities | Teacher | Elementary | | | 1/10 | | 1/15 | |
| | | | Secondary | | | 1/15 | 1/15 | 1/15 | |
| H16 | Physically Handicapped | Teacher | Elementary | | | 1/10 | | | |
| | | | Secondary | | | 1/12 | | | |
| | | | All Grades | | | | | | 1/8 |

State Name: Alabama

Special Education Personnel Estimated Requirements/Employment Comparison [1]

Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level: Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind | MA | X | | | | 1 | | | | | | | | 1 |
| | Uk | X | | | | | | | | | | 6 | | 6 |
| | Total | | | | 1 | 1 | | | | | [2] | 6 | 1[3] | 7 |
| A/Blind | Uk | X | | | | | | | | | [2] | 6 | [2] | 6 |
| T/Partially Sighted | BA | X | | 1 | | | | | | | | | | 1 |
| | MA | X | | 1 | | | | | | | | | | 1 |
| | Total | | [2] | 2 | 3 | [4] | | | | | | | 3[3] | 2 |
| T/Hearing Handicapped | Uncert. | | | 2 | | 2 | | | | | | 6 | | 10 |
| | None | X | | | | 28 | | | | | | 3 | | 31 |
| | BA | X | | | | 26 | | | | | | | | 26 |
| | MA | X | | 1 | | 6 | | | | | | | | 7 |
| | Uk | X | | | | | | 7 | | | | 1 | [2] | 8 |
| | Total | | [2] | 3 | 59 | 62 | 11 | 7 | | | [2] | 10 | 70[3] | 82 |
| Th/Hearing Handicapped | BA | X | | | | | | | | | | 3 | | 3 |
| | Total | | | | | | | | | | [2] | 3 | | 3 |
| O/Vocational Teacher for Hearing Handicapped | None | X | | | | | | | | | | 9 | | 9 |
| | BA | X | | | | | | | | | | 2 | [2] | 2 |
| | Total | | | | | | | | | | [2] | 11 | [2] | 11 |
| O/Psychologist for Hearing Handicapped | BA | X | | | | | | | | | | 1 | | 1 |
| | Total | | | | | | | | | | [2] | 1 | [2] | 1 |

[1] Based on enrollment data only (no waiting list data available)
[2] Calculations cannot be made due to missing data
[3] Calculations incomplete due to missing data
[4] Employment data unavailable

Uk - Unknown

Alabama

State Name: Alabama  Special Education Personnel Estimated Requirements/Employment Comparison 1/  Data Period 1968 -1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| O/Audiologist for Hearing Handicapped | BA | X |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
|  | Total |  |  |  |  |  |  |  |  |  | 2/ | 1 | 2/ | 1 |
| T/Emotionally Disturbed | BA | X |  |  |  |  |  |  |  |  |  | 2 |  | 2 |
|  | MA | X |  |  |  |  |  |  |  |  |  | 4 |  | 4 |
|  | Total |  |  |  | 4 3/ | 4/ |  |  |  |  | 2/ | 6 | 4 3/ | 6 |
| T/Mentally Retarded | Uncert. |  |  |  |  | 30 |  | 25 |  |  |  |  |  | 55 |
|  | BA | X |  |  |  | 238 |  | 68 |  |  |  | 5 |  | 311 |
|  | MA | X |  | 2 |  | 62 |  | 51 |  |  |  | 8 |  | 123 |
|  | Uk | X |  |  |  | 20 |  | 11 |  |  |  |  |  | 31 |
|  | Total |  | 2/ | 2 | 470 3/ | 350 | 210 3/ | 155 |  |  | 30 | 11 | 710 3/ | 518 |
| Th/Speech for Mentally Retarded | BA | X |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
|  | MA | X |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
|  | Total |  |  |  |  |  |  |  |  |  | 2/ | 2 | 2/ | 2 |
| O/Vocational Teacher for Mentally Retarded | BA |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
|  | MA |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
|  | Total |  |  |  |  |  |  |  |  |  | 2/ | 2 | 2/ | 2 |
| O/Psychologist for Mentally Retarded | Dr. | X |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
|  | Total |  |  |  |  |  |  |  |  |  | 2/ | 1 | 2/ | 1 |
| O/Instructor for M.R. | Uk |  |  |  |  |  |  |  |  |  | 2/ | 5 | 2/ | 5 |
| Th/Physical for Mentally Retarded & Physically Handicapped | BA | X |  |  |  |  |  |  |  |  |  | 6 |  | 6 |
|  | MA | X |  |  |  |  |  |  |  |  |  | 3 |  | 3 |

1/ Based on enrollment data only (no waiting list data available)

2/ Calculations cannot be made due to missing data

3/ Calculations incomplete due to missing data

4/ Employment data unavailable

Uk - Unknown

Alabama

State Name: Alabama    Special Education Personnel Estimated Requirements/Employment Comparison [1]    Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level<br>Preschool<br>Esti-mated | <br><br>Employed | <br>Elementary<br>Esti-mated | <br><br>Employed | <br>Secondary<br>Esti-mated | <br><br>Employed | <br>Ungraded<br>Esti-mated | <br><br>Employed | <br>Unspecified<br>Esti-mated | <br><br>Employed | <br>Total<br>Esti-mated | <br><br>Employed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Th/Physical (cont.) | Uk | X | | | | | | | | | | 5 | | 5 |
| | Total | | | | | | | | | | 2/ | 14 | 2/ | 14 |
| O/Vocational Rehabilitation Counselor | BA | | | | | | | | | | | 6 | | 6 |
| | Total | | | | | | | | | | 2/ | 6 | 2/ | 6 |
| Th/Speech | BA | X | | | | 21 | | | | | | | | 21 |
| | MA | X | | | | 17 | | | | | | | | 17 |
| | Total | | | | 2/ | 38 | | | | | 120 | | 120 | 38 |
| T/ Special Learning Disabilities | Uncert. | | | | | | | | | | | 1 | 2/ | 1 |
| | BA | X | | | | | | | | | | 2 | | 2 |
| | MA | X | | | | 1 | | | | | | 2 | | 3 |
| | Total | | | | 2/ | 1 | | | | | 2/ | 5 | 2/ | 6 |
| T/Physically Handicapped | Uncert. | | | | | | | | | | | 1 | | 1 |
| | BA | X | | | | | | | | | | 14 | | 14 |
| | MA | X | | | | | | | | | | 2 | | 2 |
| | Uk | X | | | | | | | | | | 2 | | 2 |
| | Total | | | | | | | | | | 2/ | 19 | 2/ | 19 |
| O/Social Worker for the Physically Handicapped | BA | | | | | | | | | | | 3 | | 3 |
| | MA | | | | | | | | | | | 15 | | 15 |
| | Total | | | | | | | | | | 2/ | 18 | 2/ | 18 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

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[1] Based on enrollment data only (no waiting list data available)

2/ Calculations cannot be made due to missing data

Uk - Unknown

State Name: Alaska

## Overview of Special Education Programs

Data Period 1968-69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ungraded | | | | | Residential | Day Special Class | Itinerant | Out of State | | |
| H-1 | Blind | 5-18 | | | | | | X | | X | | |
| H-2 | Partially Sighted | 5-18 | | | | | | X | | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 5-18 | | | | | | X | | X | | |
| H-5 | Hard of Hearing | 5-18 | | | | | | X | | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally | 5-18 | | | | | | X | | X | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 5-18 | | | | | | X | | | | |
| H-10 | TMR | 5-18 | | | | | | X | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | 5-18 | | | | | X | | | | | |
| H-12 | Speech Handicaps | | | | | | | | | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | | | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | | | | | | | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| H-25 | Other Health Impaired | 5-18 | | | | | | | X | | | |
| H-26 | Ortho and Neuro Handicapped | 5-18 | | | | | | X | | X | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state

State Name: Alaska Enrollments In Special Education Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Day Special Class | Itinerant | Out of State | | |
| H-1 | Blind | Ungraded | | 3 | | 9 | | Not Available |
| H-2 | Partially Sighted | Ungraded | | 35 | | | | |
| H-4 | Deaf | Ungraded | | 62 | | 8 | | |
| H-5 | Hard of Hearing | Ungraded | | 144 | | | | |
| H-7 | Emotionally Disturbed | Ungraded | | 221 | | 4 | | |
| H-9 | EMR | Ungraded | | 561 | | | | |
| H-10 | TMR | Ungraded | | | | | | |
| H-11 | MR (Institutionalized) | Ungraded | 40 | | | | | |
| H-25 | Other Health Impaired | Unspecified | | | 87 | | | |
| H-26 | Orthopedically and Neurologically | Unspecified | | 190 | | 3 | | |

State Name: Alaska Personnel/Pupil Contact Ratio Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Day Special Class | | | | |
| H-1 | Blind | Teacher | Ungraded | 1/10 | | | | |
| H-4 | Deaf | Teacher | Ungraded | 1/10 | | | | |
| H-7 | Emotionally Disturbed | Teacher | Ungraded | 1/10 | | | | |
| H-9 | EMR | Teacher | Ungraded | 1/15 | | | | |
| H-10 | TMR | Teacher | Ungraded | 1/10 | | | | |
| H-25 | Other Health Impaired | Special Education Teacher | Ungraded | 1/10 | | | | |
| H-26 | Ortho and Neuro Handicapped | Teacher of Physically Handicapped | Ungraded | 1/10 | | | | |

State Name: Alaska

### Special Education Personnel Estimated Requirements/Employment Comparison [1]

Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind | Uk |  |  |  |  |  |  |  | 1[2] | [4] |  | 2 | 1[2] | 2 |
| T/Partially Sighted | Uk |  |  |  |  |  |  |  | [3] | [4] |  | 59 | [3] | 59 |
| T/Deaf | Uk |  |  |  |  |  |  |  | 6[2] | [4] |  | 5 | 6[2] | 5 |
| T/Emotionally Disturbed | Uk |  |  |  |  |  |  |  | 22[2] | [4] |  | 4 | 22[2] | 4 |
| T/EMR and TMR | Uk |  |  |  |  |  |  |  | 56[2] | [4] |  |  | 56[2] | 33 |
| T/MR—Institutionalized | Uk |  |  |  |  |  |  |  | [3] | [4] |  |  | [3] | [4] |
| T/Physically Handicapped | Uk |  |  |  |  |  |  |  | 19 | [4] |  | 12 | 19 | 12 |
| Th/Speech | Uk |  |  |  |  |  |  |  |  |  | [3] | 16 | [3] | 16 |
| T/Multiple Handicapped | Uk |  |  |  |  |  |  |  |  |  | [3] | 6 | [3] | 6 |

[1] Based upon enrollment data only (no waiting list data available)
[2] Calculations incomplete due to missing data
[3] Calculations cannot be made due to missing data
[4] Employment data unavailable

Uk - Unknown

State Name: Arizona　　Overview of Special Education Programs　　Data Period 1968-1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Elementary | | Secondary | | Un-graded | Residential Special Class | Special Schools | Special Class in Regular Sch. | Home Bound | | |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | 6-14 | | 15-18 | | | X | | | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 6-14 | | 15-18 | | | X | | | | | |
| H-7 | Emotionally Handicapped | | | | | 6-18 | | X | X | | | |
| H-8 | Mentally Retarded | pre-ac 6-9 | inter 9-13 | Jr. H. 13-15 | Sr. H. 15-20 | | | X | X | | | |
| H-9 | EMR | | | | | | | | | | | |
| H-10 | TMR | pre-pri. 6-10 | pri. 9-12 | inter 11-15 | teen age 14-20 | | | X | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | pri 6-11 | adv 10-15 | | | | | | | | | |
| H-12 | Speech Handicaps | 6-14 | | 15-18 | | | | | | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | | | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped 2/ | 6-14 | | 15-18 | | | | X | X | | | |
| H-17 | Homebound | | | | | 6-18 | | | | X | | |
| | | | | | | | | | | | | |
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1/ If no entry is shown, category is not applicable to the state

2/ Includes Special Learning Disabilities

State Name: Arizona　　Enrollments In Special Education　　Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type: Residential Special Class | Special Schools | Special Class in Regular School | Home Bound | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| H-3 | Visually Handicapped | Elementary | 70 | | | | | NOT AVAILABLE |
| | | Secondary | 50 | | | | | |
| H-6 | Hearing Handicapped | Elementary | 197 | | | | | |
| | | Secondary | 87 | | | | | |
| H-7 | Emotionally Disturbed | Ungraded | | 13 | 157 | | | |
| H-9 | EMR | Elementary | | 22 | 3506 | | | |
| | | Secondary | | | 1338 | | | |
| H-10 | TMR | Elementary | | 171 | 590 | | | |
| H-16 | Physically Handicapped | Elementary | | 24 | 165 | | | |
| | | Secondary | | | 71 | | | |
| H-17 | Homebound | Elementary | | | | 339 | | |
| | | Secondary | | | | 385 | | |
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Arizona

State Name: Arizona Personnel/Pupil Contact Ratio Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Special School | Special Class in Regular Schools | Home-bound | |
| H-7 | Emotionally Disturbed | Teacher | Preschool | | 1/5-1/8 | 1/5-1/8 | | |
| | | | Elementary | | 1/5-1/10 | 1/5-1/10 | | |
| | | | Secondary | | 1/6-1/12 | 1/6-1/12 | | |
| | | | Ungraded | | 1/6-1/15 | 1/6-1/15 | | |
| H-9 | EMR | Teacher | Elementary | | 1/8-1/15 | 1/8-1/15 | | |
| | | | Secondary | | 1/17 | 1/17 | | |
| H-10 | TMR | Teacher | Elementary | | 1/5-1/10 | 1/5-1/10 | | |
| H-16 | Physically Handicapped | Teacher | Elementary | | 1/6-1/15 | 1/6-1/15 | | |
| H-17 | Homebound | Teacher | Elementary | | | | 1/5 | |
| | | | Secondary | | | | 1/5 | |
| | | | | | | | | |
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State Name: Arkansas Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Ungraded | | Residential | Special | Day Special | Resource | Itinerant | |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | | 6-12 | 13-18 | 6-18 | | X | | | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 4-5 | 6-12 | 13-18 | | | X | | X | | | |
| H-7 | Emotionally | | 6-12 | 13-18 | | | X | | X | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 6-12 | 13-18 | | | X | | X | | | |
| H-10 | TMR (contains some Severe) | | 6-12 | 13-18 | | | X | | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | 6-18 | | | | | | X | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | 2.5-5 | 6-12 | 13-18 | | | | X | X | X | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | 6-12 | 13-18 | 6-18 | | | X | X | | X | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state.

Arkansas

State Name: Arizona

## Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968 -1969

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Emotionally Disturbed | Uk |  |  |  | 2/ | 20 | 2/ | 4 | 11-29 |  |  |  | 11-29 3/ | 24 |
| T/EMR | Uk |  |  |  | 234-438 | 261 | 78 | 71 |  |  |  |  | 312-438 | 332 |
| T/TMR | Uk |  |  |  | 76-152 | 67 | 2/ | 1 |  |  |  |  | 76-152 | 68 |
| O/Speech & Hearing Clinician | Uk |  |  |  | 2/ | 48 |  |  |  |  |  |  | 2/ | 48 |
| T/Physically Handicapped | Uk |  |  |  | 13-32 | 12 |  |  |  |  |  |  | 13-32 | 12 |
| T/Visually Handicapped | Uk |  |  |  | 2/ | 22 | 2/ | 14 |  |  |  |  | 2/ | 36 |
| T/Learning Disabilities | Uk |  |  |  | 2/ | 5 |  |  |  |  |  |  | 2/ | 5 |
| T/Deaf and Hard of Hearing | Uk |  |  |  | 2/ | 27 | 2/ | 20 |  |  |  |  | 2/ | 47 |
| T/Homebound | Uk |  |  |  | 68 | 16 | 77 | 32 |  |  |  |  | 145 | 48 |

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1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations cannot be made due to missing data
3/ Calculations incomplete due to missing data
Uk-Unknown

State Name: Arkansas Enrollments In Special Education Data Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting* List Incomplete |
|---|---|---|---|---|---|---|---|---|
| | | | Resident | Special | Day Special | Resource | Itinerant | |
| H3 | Visually Handicapped | Elementary | 105 | | | | | |
| | | Secondary | 59 | | | | | |
| | | Ungraded | 9 | | | | | |
| H6 | Hearing Handicapped | Preschool | 22 | | | | | 18 |
| | | Elementary | 192 | | 7 | | | |
| | | Secondary | 100 | | | | | |
| | | Unspecified | | | | | | 18 |
| H7 | Emotionally Disturbed | Secondary | 95 | | 25 | | | 145 |
| H8 | Mentally Retarded | Unspecified | | | | | | 783 |
| H9 | EMR | Elementary | 102 | | 3180 | | | |
| | | Secondary | 217 | | 840 | | | |
| H10 | TMR | Elementary | 190 | 134 | 80 | | | |
| | | Secondary | 403 | | | | | |
| H12 | Speech Handicaps | Ungraded | | | | | 3900 | |
| H14 | Special Learning Disabilities | Preschool | | 200 | | | | |
| | | Elementary | | 150 | 12 | 360 | | |
| | | Secondary | | | | 20 | | |
| H16 | Physically Handicapped | Elementary | | 10 | 58 | | | |
| | | Secondary | | | 32 | | | |
| | | Ungraded | | | | | 170 | |
| | | | | | | | | |
| | | | | | | | | |

* Supplied by Residential Schools only

Arkansas

State Name: Arkansas Personnel/Pupil Contact Ratio Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Resident | Special | Day Special | Resource | Itinerant |
| H-3 | Visually Handicapped | Teacher/Institution | Elementary | 1/12 | | | | |
| | | | Secondary | 1/12 | | | | |
| | | | Ungraded | 1/12 | | | | |
| | | | Elementary | 1/12 | | | | |
| H-6 | Hearing Handicapped | Teacher/Institution | Preschool | 1/1 | | | | |
| | | | Elementary | 1/10 | | | | |
| | | | Secondary | 1/10 | | | | |
| | | Teacher | Elementary | | | 1/6-10 | | |
| H-7 | Emotionally Disturbed | Teacher/Institution | Secondary | 1/8 | | | | |
| | | Teacher | Secondary | | | 1/15 | | |
| | | Aide | Secondary | 1/8 | | | | |
| H-9 | EMR | Teacher | Elementary | | | 1/15 | | |
| | | Teacher/Colony | Elementary | 1/10 | | | | |
| | | Aide | Secondary | | | 1/15 | | |
| | | Teacher/Colony | Secondary | 1/10 | | | | |
| | | | Ungraded | 1/10 | | | | |
| H-10 | TMR | Teacher | Elementary | | 1/8 | 1/8 | | |
| | | Teacher/Colony | Elementary | 1/8 | | | | |
| | | | Secondary | 1/8 | | | | |
| | | | Ungraded | 1/8 | | | | |
| H-12 | Speech Handicaps | Therapist | Ungraded | 1/25 | | | | 1/100 |
| | | Therapist/Colony | Ungraded | 1/50 est | | | | |

State Name: Arkansas Personnel/Pupil Contact Ratio Data Period 1968 - 1969

| Handicap Code | Handicap Category | Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Resident | Special | Day Special | Resource | Itinerant |
| H-14 | Special Learning Disabilities | Teacher | Preschool | | 1/25 | | | |
| | | | Elementary | | 1/25 | | 1/15 | |
| | | | Secondary | | | | 1/15 | |
| | | Aide | Elementary | | 1/25 | | | |
| H-16 | Physically Handicapped | Teacher | Elementary | | 1/10 | 1/10 | | |
| | | | Secondary | | | 1/10 | | |
| | | Therapist/Occupational | Elementary | | | 1/25 | | |
| | | Therapist/Physical | Elementary | | | 1/25 | | |
| | | Teacher/Homebound FT | Ungraded | | | | | 1/30 |
| | | Teacher/Homebound PT | Ungraded | | | | | 1/1 |

State Name: Arkansas    Special Education Personnel Estimated Requirements/Employment Comparison 1/    Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Colony, EMR | Total | | | | 10 | 4 | 21 | 4 | | | 6 | 2/ | 31 | 14 |
| T/TMR | None | X | | | | 2 | | | | | | | | 2 |
| | None | | | | | 15 | | | | | | | | 15 |
| | BA | X | | | | 7 | | | | | | | | 7 |
| | MA | X | | | | 1 | | | | | | | | 1 |
| | Total | | | | 27 | 25 | | | | | | | 27 | 25 |
| T/Colony, TMR | None | | | | | 9 | | 5 | 3/ | 4 | | | | 18 |
| | BA | | | | | 1 | | 3 | | 6 | | | | 10 |
| | MA | | | | | | | 2 | | 3 | | | | 5 |
| | Total | | | | 24 | 10 | 50 | 10 | 3/ | 13 | | | 74 4/ | 33 |
| Th/Speech | Uncer-tified | | | | | | | | | 1 | | | | 1 |
| | None | X | | | | | | | | | | | | |
| | BA | X | | | | | | | | 32 | | | | 32 |
| | MA | X | | | | | | | | 7 | | | | 7 |
| | Total | | | | | | | | 39 | 40 | | | 39 | 40 |
| Th/Colony, Speech | None | | | | | | | | | 1 | | | | 1 |
| | BA | | | | | | | | | 1 | | | | 1 |
| | MA | | | | | | | | | 1 | | | | 1 |
| | Total | | | | | | | | 3/ | 3 | | | 3/ | 3 |
| T/Special Learning Disabilities | BA | X | | 8 | | 21 | | | | | | | | 29 |
| | MA | X | | | | 10 | | 1 | | | | | | 11 |

1/ Based upon enrollment data only (no waiting list data available).
2/ Employment data unavailable.
3/ Calculations cannot be made due to missing data.
4/ Calculations incomplete due to missing data.

State Name: **Arkansas** Special Education Personnel Estimated Requirements/Employment Comparison 1/ Data Period 1968 -1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | BA | X | | | | 11 | | 5 | | 1 | | | | 17 |
| | MA | X | | | | 5 | | 8 | | | | | | 13 |
| | Total | | | | 9 | 16 | 5 | 13 | 1 | 1 | | | 15 | 30 |
| A/Visually Handicapped | BA | | | | | 1 | | | | | | | | 1 |
| | Total | | | | 9 | 1 | | | | | | | 9 | 1 |
| T/Hearing Handicapped | BA | X | | 4 | | 20 | | 3 | | | | | | 27 |
| | MA | X | | | | 4 | | 10 | | | | | | 14 |
| | None | X | | | | 6 | | 10 | | | | | | 16 |
| | Total | | 2 | 4 | 20 | 30 | 10 | 23 | | | | | 32 | 57 |
| T/Emotionally Disturbed | BA | X | | | | | | 7 | | | | | | 7 |
| | MA | X | | | | | | 2 | | | | | | 2 |
| | Total | | | | 32 | 2/ | 3/ | 9 | | | | | 32 | 9 |
| A/Emotionally Disturbed | None | | | | | | | 2 | | | | | | 2 |
| | Total | | | | 32 | 2/ | 3/ | 2 | | | | | 32 | 2 |
| T/EMR | Uncertified | | | | | 1 | | | | | | | | 1 |
| | BA | X | | | | 166 | | 49 | | | | | | 215 |
| | MA | X | | | | 45 | | 7 | | | | | | 52 |
| | Total | | | | 212 | 212 | 56 | 56 | | | | | 268 | 268 |
| T/Colony, EMR | BA | | | | | 4 | | 3 | | 2 | | | | 9 |
| | MA | | | | | | | 1 | | 3 | | | | 4 |
| | None | | | | | | | | | 1 | | | | 1 |

1/ Based upon enrollment data only (no waiting list data available).

2/ Employment data unavailable .

3/ Calculations cannot be made due to missing data.

4/ Calculations incomplete due to missing data.

State Name: Arkansas　　Special Education Personnel Estimated Requirements/Employment Comparison [1]　　Data Period 1968- 1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Special Learning Disabilities | Total |  | 8 | 8 | 30 | 31 | 1 | 1 |  |  |  |  | 39 | 40 |
| A/Special Learning Disabilities | BA |  |  |  |  | 5 |  |  |  |  |  |  |  | 5 |
|  | Total |  |  |  | 7 | 5 |  |  |  |  |  |  | 7 | 5 |
| T/Physically Handicapped | BA | X |  |  |  | 3 |  | [2] |  | 40 |  |  |  | 44 |
|  | MA | X |  |  |  | 3 |  | [2] |  |  |  |  |  | 5 |
|  | None |  |  |  |  | 1 |  |  |  |  |  |  |  | 1 |
|  | Total |  |  |  | 6 | 7 | 3 | 3 | 175 | 40 |  |  | 184 | 50 |
| Th/Occupational | MA | X |  |  |  | 1 |  |  |  |  |  |  |  | 1 |
|  | Total |  |  |  | 2 | 1 |  |  |  |  |  |  | 2 | 1 |
| Th/Physical | BA | X |  |  |  | 1 |  |  |  |  |  |  |  | 1 |
|  | Total |  |  |  | 2 | 1 |  |  |  |  |  |  | 2 | 1 |

[1] Based upon enrollment data only (no waiting list data available).

[2] Employment data unavailable.

State Name: California Overview of Special Education Programs Data Period 1968- 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Unspecified | | Residential School | Day Special Class | Resource Room | Itinerant | Teleclass | |
| H-1 | Blind | 3-4 | 5-12 | 13-21 | | | X | X | | | | |
| H-2 | Partially Sighted | 3-4 | 5-12 | 13-21 | | | | | X | X | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf and Severely Hard of Hearing | 3-4 | 5-14 | 15-20 | | | X | X | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally | | | | | | | | | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 6-14 | 15-20 | | | X | X | | | | |
| H-10 | TMR | | 6-14 | 15-21 | | | X | X | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | | | | | | | | |
| H-13 | Speech and Hearing | | | | 6-21 | | | | X | | | |
| H-14 | Special Learning Disabilities | | | | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped * | 3-4 | 5-14 | 15-20 | | | X | X | X | | X | |
| H-17 | Homebound | | | | | | | | | | | |
| H-18 | Multiple Handicapped | | | | 5-21 | | X | | | | | |
| H-21 | Educationally Handicapped ** | | 6-14 | 15-20 | | | | X | X | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state.
* Includes other health impaired.

** Includes emotionally disturbed and special learning disabilities.

State Name: California Enrollments In Special Education Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential School | Day Special Class | Itinerant | Unknown Part time Program | Unknown | |
| H1 | Blind | Preschool | 5 | | | | | |
| | | Elementary | 126 | | | | | |
| | | Secondary | 10 | | | | | |
| | | Unspecified | | 1739 | | | | |
| H2 | Partially Sighted | Unspecified | | | | 935 | | Most of data is incomplete |
| H4 | Deaf and Severely Hard of Hearing | Preschool | | 997 | | | | |
| | | Elementary | 840 | 2220 | | | | |
| | | Secondary | 380 | 1099 | | | | |
| H9 | Educable Mentally Retarded | Elementary | 578 | | | | | |
| | | Secondary | | | | | | |
| H10 | Trainable Mentally Retarded | Elementary | 1160 | 7578 | | | | |
| | | Secondary | | 1145 | | | | |
| H13 | Speech and Hearing | Unspecified | | | 158751 | | | 79856 |
| H16 | Orthopedically H.C. and Other Health Impaired (Physically Handicapped) | Preschool | 2 | | | | | |
| | | Elementary | 77 | | | | | |
| H18 | Multiple Handicapped | Unspecified | 1328 | | | | | |
| H21 | Educationally Handicapped | Unspecified | | | | | 33000 | |

State Name: California

Personnel/Pupil Contact Ratios

Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types: Residential School | Day Special Class | Resource Room | Itinerant | Teleclass |
|---|---|---|---|---|---|---|---|---|
| H1 | Blind | Teacher | Preschool | 1/16 | 1/8 | | | |
| | | | Elementary | 1/8 | 1/8 | | | |
| | | | Secondary | 1/10 | 1/10 | | | |
| H2 | Partially Sighted | Teacher | Preschool | | 1/10 | | | |
| | | | Elementary | | 1/10 | 1/14 | 1/18 | |
| | | | Secondary | | 1/12 | 1/16 | 1/20 | |
| H4 | Deaf and Severely Hard of Hearing | Teacher | Preschool | 1/6 | 1/6 | | | |
| | | | Elementary | 1/8 | 1/8 | | | |
| | | | Secondary | 1/8 | 1/10 | | | |
| | | Aide | Preschool | 1/6 | | | | |
| H9 | Educable Mentally Retarded | Teacher | All Grades | | 1/15 | | | |
| | | | | | | | | |
| H10 | Trainable Mentally Retarded | Teacher | All Grades | | 1/10 | | | |
| | | Instructional Aide | Elementary | | 1/20 | | | |
| | | | Secondary | | 1/30 | | | |
| H13 | Speech and Hearing | Speech Therapist | All Grades | | | | 1/15 | |
| H16 | Orthopedically H.C. and Other Health Impaired (Physically Handicapped) | Teacher | Preschool | 1/12 | 1/12 | | | |
| | | | Elementary | 1/12 | 1/14 | | | |
| | | | Secondary | 1/14 | 1/16 | 1/24 | | |
| | | Attendant | Preschool | | 1/12 | | | |
| | | | Elementary | | 1/14 | | | |
| | | | Secondary | | 1/16 | | | |
| H21 | Educationally Handicapped | Teacher | All Grades | | 1/10 | 1/32 | | |

State Name: California

Special Education Personnel Estimated Requirements/Employment Comparison [1]

Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | Uk | X | 1[2] | 1 | 13[2] | 25 | 1[2] | .5 | | | [3] | 254 | 15[2] | 281 |
| T/Deaf | None | X | | 3 | | | | | | | | 29 | | 32 |
| | Uk | X | | 168 | | | | | | | | 602 | | 770 |
| | Total | | 166[2] | 171 | 382 | [4] | 157 | [4] | | | [3] | 631 | 705[2] | 802 |
| T/Mentally Retarded | Uk | | | | 3545[2] | [4] | 1066[2] | [4] | | | [3] | 793 | 4611 | 793 |
| Th/Speech | Uk | | | | | | | | | | 2074 | 1481 | 2074 | 1481 |
| T/Orthopedically Handicapped | Uk | | 1 | 1 | 6 | 8 | | | | | [3] | 430 | 7[2] | 439 |
| A/TMR | Uk | | | | 379 | [4] | 14 | [4] | | | | | 393 | [4] |

[1] Based upon enrollment data only (no waiting list data available).

[2] Calculations incomplete due to missing data.

[3] Calculations cannot be made due to missing data.

[4] Employment data unavailable.

Uk - Unknown

State Name: Colorado Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Ungraded | | | Residential | Special Schools | Cooperative Special Class | Resource Room | Itinerant |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | 3-5 | 6-12 | 13-18 | 3-21 | | | | | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped (Aurally) | 3-5 | 6-12 | 13-18 | 3-21 | | | | | | | |
| H-7 | Emotionally Disturbed (includes SLD) | | 6-12 | 13-18 | 5-21 | | | | | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 5-12 | 13-18 | 5-21 | | | | | | | |
| H-10 | TMR | | 5-12 | 13-18 | 5-21 | | | | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | 5-12 | 13-18 | 3-21 | | | | | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | | | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | | | | | | | | | | |
| H-17 | Homebound | | 5-12 | 13-18 | 3-21 | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

NO DATA PROVIDED

Colorado

1/ If no entry is shown, category is not applicable to the state.

State Name: Colorado    Enrollments In Special Education    Data Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | | Special Schools | Cooperative Special Class | Resource Room | Itinerant | |
| H3 | Visually Handicapped | Elementary | | 5 | 43 | | | NOT AVAILABLE |
| | | Secondary | | 3 | 30 | | | |
| | | Unspecified | | 7 | | | 90 | |
| H6 | Hearing Handicapped | Preschool | | 1 | 10 | | | |
| | | Elementary | | 28 | 254 | | 6 | |
| | | Secondary | | 6 | 52 | | 7 | |
| | | Unspecified | | 8 | 35 | 14 | 25 | |
| H7 | Emotionally Disturbed | Elementary | | 134 | 629 | 1405 | 452 | |
| | | Secondary | | 35 | 151 | 312 | | |
| | | Unspecified | | 9 | 47 | 85 | 79 | |
| H9 | EMR | Preschool | | 244 | | | | |
| | | Elementary | | 290 | 4097 | | | |
| | | Secondary | | 182 | 2963 | | | |
| | | Unspecified | | 6 | 56 | | | |
| H10 | TMR | Unspecified | | 688 | | | | |
| H11 | Mentally Retarded | Unspecified | | 331 | | | | |
| H12 | Speech Handicaps | Unspecified | | 159 | | | 17,102 | |
| H16 | Physically Handicapped | Elementary | | 134 | 629 | 1405 | 452 | |
| | | Secondary | | 35 | 151 | 312 | | |
| | | Unspecified | | 9 | 47 | 85 | 79 | |
| | | | | | | | | |
| | | | | | | | | |

Colorado

State Name: Colorado Personnel/Pupil Contact Ratio Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Special Schools | Cooperative Special Class | Resource Room | Itinerant |
| H3 | Visually Handicapped | Teacher | All Grades | | | 1/5-1/15 | 1/5-1/15 | 1/5-1/15 |
| H6 | Hearing Handicapped | Teacher | All Grades | | | 1/5-1/10 | 1/5-1/10 | 1/10-1/15 |
| H7 | Emotionally Disturbed | Teacher | All Grades | | | 1/5-1/10 | 1/5-1/10 | 1/10-1/15 |
| H9 | EMR | Teacher | All Grades | | | 1/5-1/8 | | |
| H10 | TMR | Teacher | All Grades | | | 1/12 | 1/12 | |
| H11 | Mentally Retarded | Teacher | All Grades | | | 1/4-1/8 | 1/4-1/8 | |
| H12 | Speech Handicaps | Teacher | All Grades | | | | 1/1 | |
| H16 | Physically Handicapped | Teacher | All Grades | | | | | |

State Name: Colorado

## Special Education Personnel Estimated Requirements/Employment Comparison [1]

Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed |
| T/Visually Handicapped | Uk | X | | | 3-9 [2] | [4] | 2-6 [2] | [4] | | [4] | 6-18 [2] | 27 | 11-33 [2] | 27 |
| T/Hearing Handicapped | Uk | X | 1-2 [2] | [4] | 26-51 [2] | [4] | 6-11 [2] | [4] | 7-12 [2] | [4] | | 71 | 40-96 [2] | 71 |
| T/Emotionally Disturbed | Uk | X | | | 233-452 [2] | [4] | 46-93 [2] | [4] | 19-34 [2] | [4] | | 189 | 298-579 [2] | 188 |
| T/EMR | Uk | X | [3] | [4] | 512-819 [2] | [4] | 370-593 [4] | [4] | 7-11 [2] | [4] | | 815 | 889-1432 [2] | 815 |
| T/Mentally Retarded | Uk | X | | | | | | | | | | 302 | [3] | 302 |
| T/Physically Handicapped | Uk | X | | | | | | | | | | 47 | [3] | 47 |

[1] Based upon enrollment data only (no waiting list data available)
[2] Calculations incomplete due to missing data
[3] Calculations cannot be made due to missing data
[4] Employment data unavailable by education level

Uk - Unknown

State Name: Connecticut Overview of Special Education Programs Data Period 1968-69

| Handicap Code | Handicap Category [1] | Education Level (Age Ranges) |  |  |  |  | Education Program |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Preschool | Elementary | Secondary |  |  | Residential | Special School | Day Special Class | Integrated Cooperative | Resource Room | Itinerant |
| H-1 | Blind |  |  |  |  |  |  |  |  |  |  |  |
| H-2 | Partially Sighted |  |  |  |  |  |  |  |  |  |  |  |
| H-3 | Visually Handicapped |  |  |  |  |  |  |  |  |  |  |  |
| H-4 | Deaf |  |  |  |  |  |  |  |  |  |  |  |
| H-5 | Hard of Hearing |  |  |  |  |  |  |  |  |  |  |  |
| H-6 | Hearing Handicapped | 3-21 | 3-21 | 3-21 |  |  | X | X | X | X | X | X |
| H-7 | Emotionally | 3-21 | 3-21 | 3-21 |  |  | X | X | X |  | X |  |
| H-8 | Mentally Retarded |  |  |  |  |  |  |  |  |  |  |  |
| H-9 | EMR | 4-6 | 6-16 | 12-12 |  |  |  |  | X | X |  |  |
| H-10 | TMR | 4-6 | 6-16 | 12-12 |  |  |  |  |  |  |  |  |
| H-11 | MR (Custodial, Severe, Institutional) |  |  |  |  |  |  |  |  |  |  |  |
| H-12 | Speech Handicaps [2] |  |  |  |  |  | X |  |  | X |  |  |
| H-13 | Speech and Hearing |  |  |  |  |  |  |  |  |  |  |  |
| H-14 | Special Learning Disabilities |  |  |  |  |  |  |  | X | X | X | X |
| H-15 | Brain Injured |  |  |  |  |  |  |  |  |  |  |  |
| H-16 | Physically Handicapped | 4-6 | 5-21 | 16-21 |  |  | X | X | X |  |  |  |
| H-17 | Homebound |  |  |  |  |  |  |  |  |  |  |  |
| H-27 | Perceptually Handicapped |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

[1] If no entry is shown, category is not applicable to the state
[2] Legislation considers part of Physical Handicapped

State Name: Connecticut Enrollments In Special Education Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Special Schools | Day Special Class | Integrated Cooperative | Resource Room | Homebound |
| H-6 | Hearing Handicapped | Preschool | 127 | | 115 | 10 | | |
| | | Unspecified | 422 | | | | | |
| H-7 | Emotionally Disturbed | Ungraded | 60 | | 600 | | 228 | 180 |
| H-9 | EMR | Elementary | | | 10,230* | | | |
| | | Secondary | | | 1690* | | | |
| H-12 | Speech Handicaps | Preschool | | | | 12 | | |
| | | Elementary | 13 | | | | | |
| | | Unspecified | | | | 15,000 | | |
| H-14 | Special Learning Disabilities | Elementary | | | 160 | 429 | 387 | 314 |
| H-16 | Physically Handicapped | Preschool | | 70 | 11 | | | |
| | | Elementary | | | 160 | | | |
| | | Ungraded | 26 | | | | | |
| H-27 | Perceptually Handicapped | Unspecified | 40 | | 160 | | 110 | 230 |

* Combined figures for Day Special Class and Integrated Cooperative
No waiting list data available

State Name: Connecticut Personnel/Pupil Contact Ratio Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Resi-dential | Special School | Day Special Class | Resource Room | Home-bound |
| H-6 | Hearing Handicapped | Teacher with Aide | Preschool | 1/6 | | 1/6-1/8 | | |
| | | | Elementary | 1/6 | | 1/6-1/8 | | |
| | | | Secondary | 1/6 | | 1/6 | | |
| H-7 | Emotionally Disturbed | Teacher with Aide | Ungraded | 1/7 | 1/7 | 1/7 | 1/9 | 1/5-1/6 |
| H-9 | EMR | Teacher* | Preschool | | | 1/14 | | |
| | | | Elementary | | | 1/16 | | |
| | | | Secondary | | | 1/18 | | |
| | | Teacher with Aide* | Preschool | | | 1/18 | | |
| | | | Elementary | | | 1/20 | | |
| | | | Secondary | | | 1/24 | | |
| | | Teacher** | Elementary | | | 1/12 | | |
| | | | Secondary | | | 1/12 | | |
| | | Teacher with Aide** | Elementary | | | 1/16 | | |
| | | | Secondary | | | 1/16 | | |
| H-10 | TMR | Teacher* | Preschool | | | 1/8 | | |
| | | | Elementary | | | 1/10 | | |
| | | | Secondary | | | 1/10 | | |
| | | Teacher with Aide* | Preschool | | | 1/12 | | |
| | | | Elementary | | | 1/15 | | |
| | | | Secondary | | | 1/15 | | |
| | | Teacher** | Elementary | | | 1/8 | | |
| | | | Secondary | | | 1/8 | | |

* For towns having more than 3000 school age children

** For towns having less than 3000 school age children

**State Name:** Connecticut Personnel/Pupil Contact Ratio Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Resi-dential | Special Class | Day Special Class | Inte-grated Coopera-tive*** | Resource Room | Home-bound |
| H-10 | TMR | Teacher with Aide** | Elementary | | | 1/12 | | | |
| | | | Secondary | | | 1/12 | | | |
| H-12 | Speech Handicaps | Clinician | Unspecified | | | | | | |
| | | Aide | Unspecified | | | | 1/35-1/40 | | |
| H-16 | Physically Handicapped | Teacher | Unspecified | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
| | | Teacher with Aide | Unspecified | 1/15 | 1/15 | 1/15 | 1/15 | 1/15 | 1/15 |
| H-27 | Perceptually Handicapped | Teacher | Unspecified | 1/8 | 1/8 | 1/8 | | 1/15-1/20 | 1/15 |
| | | Teacher with Aide | Unspecified | 1/12 | 1/12 | 1/12 | | 1/15 | |

** For towns having less than 3000 school age children
*** No data for this program on preceeding page

State Name: Connecticut　　Special Education Personnel Estimated Requirements/Employment Comparison 1/　　Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/EMR with Aide | Uk | | | | 508 | 3/ | 72 | 3/ | | | 2/ | 440 | 580 | 440 |
| T/TMR | Uk | | | | | | | | | | 2/ | 136 | 2/ | 136 |
| T/TMR and EMR | Uk | | | | | | | | | | 2/ | 90 | 2/ | 90 |
| A/EMR | Uk | | | | | | | | | | 2/ | 10 | 2/ | 10 |
| A/TMR | Uk | | | | | | | | | | 2/ | 30 | 2/ | 30 |
| A/TMR and EMR | Uk | | | | | | | | | | 2/ | 10 | 2/ | 10 |
| T/Emotionally Disturbed | Uk | | | | | | | | | | 149 | 97 | 149 | 97 |
| A/Emotionally Disturbed | Uk | | | | | | | | | | 2/ | 20 | 2/ | 20 |
| T/Special Learning Disabilities | Uk | | | | | | | | | | 2/ | 100 | 2/ | 100 |
| A/Special Learning Disabilities | Uk | | | | | | | | | | 2/ | 20 | 2/ | 20 |
| T/Perceptually Handicapped | Uk | | | | | | | | | | 47 | 50 | 47 | 50 |
| A/Perceptually Handicapped | Uk | | | | | | | | | | 2/ | 12 | 2/ | 12 |
| O/Speech and Hearing Clinician | Uk | | 2 | 3/ | | | 214 | 3/ | | | 2/ | 250 | 216 | 250 |
| T/Hearing Handicapped with Aide | Uk | | 40 | 3/ | | | | | | | 70 | 18 | 110 | 18 |
| T/Hearing Handicapped | Uk | | | | | | | | | | 2/ | 22 | 2/ | 22 |
| A/Speech and Hearing | Uk | | 4 | 3/ | | | 375-428 | 3/ | | | 2/ | 13 | 379-432 | 13 |
| T/Physically Handicapped | Uk | | 7 | 3/ | 13 | 3/ | | | 2 | 3/ | | | 22 | 3/ |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations cannot be made due to missing data
3/ Employment data unavailable
Uk - Unknown

State Name: Delaware Overview of Special Education Programs Data Period 1968-1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | | | Residential | Special | Day Special | Cooperative Special | Resource Room | Itinerant |
| H-1 | Blind | 4-6 | 7-12 | 13→ | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 4-6 | 7-12 | 13→ | | | | | | | | |
| H-7 | Emotionally & Socially Handicapped | | 7-12 | 13→ | | | | | | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 7-12 | 13→ | | | | | | | | |
| H-10 | TMR | 4-6 | 7-12 | 13→ | | | | | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | | | | | | | | |
| H-13 | Speech and Hearing | | 7-12 | 13→ | | | | | | | | |
| H-14 | Special Learning Disabilities | | 7-12 | 13→ | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped (Orthopedic) | 4-6 | 7-12 | 13→ | | | | | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| H-24 | Special Physical Problem (Ungraded) | | 7-12 | 13→ | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

NO DATA PROVIDED

1/ If no entry is shown, category is not applicable to the state.

State Name: Delaware Enrollments In Special Education Data Period1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Cooperative Special | Itinerant | | | No Program Breakdown | |
| H1 | Blind | Elementary | | | | | 15 | |
| | | Ungraded | | | | | 45 | |
| H6 | Hearing Handicapped | Elementary | | | | | 86 | |
| H7 | Emotionally/Socially Handicapped | Elementary | | | | | 683 | |
| H9 | EMR | Elementary | 1966 | | | | 1966 | |
| H10 | TMR | Ungraded | | | | | 522 | |
| H13 | Speech and Hearing | Ungraded | | 2639 | | | 2639 | NOT AVAILABLE |
| H16 | Physically Handicapped (Ortho) | Elementary | | | | | 164 | |
| H24 | Special Physical Problem | Ungraded | | 145 | | | 145 | |

Delaware

State Name: Delaware

Personnel/Pupil Contact Ratio

Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | All Programs | | | | |
| H1 | Blind | Teacher/Braille | All Grades | 1/150 | | | | |
| | | Counselor | All Grades | 1/40 | | | | |
| | | Case Worker | All Grades | 1/80 | | | | |
| H6 | Hearing Handicapped | Teacher | All Grades | 1/8 | | | | |
| | | Aide | Preschool | 1/8 | | | | |
| | | | Elementary | 1/16 | | | | |
| | | | Secondary | 1/16 | | | | |
| | | Instr. Media Specialist | Ungraded | 1/80 | | | | |
| H7 | Emotionally Disturbed | Teacher | All Grades | 1/10 | | | | |
| H9 | EMR | Teacher | All Grades | 1/15 | | | | |
| H10 | TMR | Full-time Nurse | All Grades | 1/50 | | | | |
| | | Teacher | All Grades | 1/12 | | | | |
| | | Aide | All Grades | 1/12 | | | | |
| H13 | Speech and Hearing | Specialists | All Grades | 1/80-1/100 | | | | |
| H14 | Special Learning Disabilities | Teacher | All Grades | 1/8 | | | | |
| | | Specialists | All Grades | 1/24 | | | | |
| H16 | Physically Handicapped (Orthopedically) | Teacher | All Grades | 1/10 | | | | |
| | | Aide | All Grades | 1/10 | | | | |
| | | Nurse | All Grades | 1/50 | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

State Name: Delaware Special Education Personnel Estimated Requirements/Employment Comparison 1/ Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind | Uk | X | | | | | | | | | 2 | 3 | 2 | 3 |
| T/Special Physical Problems | Uk | X | | | | | | | | | 2/ | 199 | 2/ | 199 |
| O/Speech Clinicians | Uk | | | | | | | | | | 26-33 | 29 | 26-33 | 29 |
| A/TMR | Uk | X | | | | | | | | | 44 | 37 | 44 | 37 |
| T/TMR | Uk | X | | | | | | | | | 44 | 41 | 44 | 41 |
| T/EMR | Uk | X | | | 76 | 78 | 56 | 60 | | | | | 132 | 138 |
| T/Hearing Handicapped | Uk | X | | | 10 | 3/ | 1 | 3/ | | | 2/ | 10 | 11 | 10 |
| A/Hearing Handicapped | Uk | X | | | 5 | 3/ | 1 | 3/ | | | 2/ | 11 | 6 | 11 |
| T/Emotionally Disturbed | Uk | | | | 36 | 3/ | 33 | 3/ | | | 2/ | 33 | 69 | 33 |
| T/Orthopedically Handicapped | Uk | | | | 15 | 3/ | 2 | 3/ | | | 2/ | 17 | 17 | 17 |
| A/Orthopedically Handicapped | Uk | | | | 15 | 3/ | 2 | 3/ | | | 2/ | 22 | 17 | 22 |
| O/Nurse for TMR | Uk | | | | | | | | | | 10 | 3/ | 10 | 3/ |
| O/Nurse for Orthopedically Handicapped | Uk | | | | 3 | 3/ | | | | | | | 3 | 3/ |

1/ Based upon enrollment data only (no waiting list data available).

2/ Calculations cannot be made due to missing data.

3/ Employment data unavailable.

Uk - Unknown

State Name: Florida Overview of Special Education Programs Data Period 1968-69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | All Grades | | Residential Special Class | Special School or Class | Cooperative Class | Resource Room | Itinerant | Unspecified Part-Time Program |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped * | 3-5 | 6-12 | 13-21 | | | X | X | | | | X |
| H-4 | Deaf ** | 3-5 | 6-15 | 16-21 | | | X | X | X | X | | |
| H-5 | Hard of Hearing | 3-5 | 6-12 | 13-21 | | | | | | | X | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally (Disturbed) | 3-5 | 6-12 | 13-21 | | | X | X | | X | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 3-5 | 6-12 | 13-21 | | | | X | | X | | |
| H-10 | TMR | 3-5 | 6-12 | 13-21 | | | | X | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | 6-21 | | | | | | X | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Specific Learning Disabilities | 3-5 | | | 6-21 | | | X | | X | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | 3-5 | 6-12 | 13-21 | | | | X | | X | X | |
| H-17 | Homebound | | | | | | | | | | | |
| H-23 | Socially Maladjusted | | | 13-21 | | | X | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

* Called "Blind and Partially Sighted"

** Includes severely hard of hearing

1/ If no entry is shown, category is not applicable to the state

Florida

State Name: Florida    Enrollments In Special Education    Date Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Special School or Class | Cooperative Class | Resource Room | Itinerant | Unspecified Part-Time Program | |
| H3 | Blind and Partially Sighted | Preschool | 5 | | | | | | |
| | | Elementary | 67 | | | | | | |
| | | Secondary | 150 | | | | | | |
| | | Unspecified | | 161 | | | | 531 | 55 |
| H4 | Deaf and Severely Hard of Hearing | Preschool | 166 | 210 | | | | | |
| | | Elementary | 200 | 352 | | 90 | | | |
| | | Secondary | 159 | 63 | | 38 | | | |
| | | Unspecified | | | 20 | 9 | | | 127 |
| H5 | Hard of Hearing | Unspecified | | | | | 1033 | | |
| H7 | Emotionally Disturbed | Preschool | 4 | | | | | | |
| | | Elementary | 26 | 740 | | 722 | | | 30* |
| | | Secondary | 80 | 128 | | 30 | | | |
| | | Unspecified | | 202 | | | | | 445 |
| H9 | Educable Mentally Retarded | Elementary | | 7302 | | 2651 | | | |
| | | Secondary | | 5474 | | 1930 | | | |
| | | Unspecified | | 692 | | 554 | | | 6223 |
| H10 | Trainable Mentally Retarded | Elementary | | 1462 | | | | | |
| | | Secondary | | 757 | | | | | |
| | | Unspecified | | 53 | | | | | 355 |
| H12 | Speech Handicaps | Unspecified | | | | | 32809 | | 11880 |
| H14 | Specific Learning Disabilities | Unspecified | | 443 | | 959 | | | 781 |
| | | (continued) | | | | | | | |

* Institutional waiting list

State Name: Florida

Enrollments In Special Education

Date Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Special School or Class | Cooperative Class | Resource Room | Itinerant | Unspecified Part-Time Program | |
| | | (continued) | | | | | | | |
| H16 | Physically Handicapped | Preschool | | 43 | | | | | |
| | | Elementary | | 566 | | | | | |
| | | Secondary | | 189 | | | | | |
| | | Unspecified | | 22 | | 34 | 2927 | | 94 |
| H23 | Socially Maladjusted | Secondary | 1276 | | | | | | |
| | | Unspecified | | | | | | | 860 |

State Name: Florida

Personnel Contact Ratio

Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Resi-dential Special Class | Special School or Class | | Resource Room | Itinerant |
| H3 | Blind and Partially Sighted | Teacher | Preschool | | 1/8 | | | |
| | | | Elementary | 1/7 | 1/10 | | | |
| | | | Secondary | 1/10 | 1/15 | | | |
| | | | All Grades | | | | | 1/20 |
| | | Peripatologist | All Grades | | | | | 1/75 |
| | | Mobility Instructor | All Grades | 1/15 | | | | |
| | | Psychologist | All Grades | 1/300 | | | | |
| | | Physical Therapist | All Grades | 1/300 | | | | |
| H4<br>H5 | Deaf and Hard of Hearing | Teacher | Preschool | 1/8 | 1/8 | | | 1/12 |
| | | | Elementary | 1/10 | 1/10 | | | 1/12 |
| | | | Secondary | 1/10 | 1/12 | | | 1/12 |
| | | Audiologist | All Grades | 1/250 | | | | |
| | | Psychologist | All Grades | 1/250 | | | | |
| H7 | Emotionally Disturbed | Teacher | Elementary | 1/5 | 1/15 | | 1/15 | |
| | | | Secondary | 1/15 | 1/15 | | 1/15 | |
| H9 | Educable Mentally Retarded | Teacher | Preschool | | 1/12 | | | |
| | | | Elementary | | 1/15 | | | |
| | | | Secondary | | 1/18 | | | |
| H10 | Trainable Mentally Retarded | Teacher | Preschool | | 1/10 | | | |
| | | | Elementary | | 1/10 | | | |
| | | | Secondary | | 1/15 | | | |
| | | | (continued) | | | | | |

State Name: **Florida** Personnel Contact Ratio Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Resi-dential Special Class | Special School or Class | | Resource Room | Itinerant |
| | | | (continued) | | | | | |
| | | Music Teacher | All Grades | | | | 1/75 | |
| | | Phys. Ed. Teacher | All Grades | | | | 1/75 | |
| H12 | Speech Handicaps | Speech Therapist | All Grades | | | | | 1/40 |
| H14 | Specific Learning Disab. | Teacher | All Grades | | 1/10 | | 1/20 | 1/20 |
| H16 | Physically Handicapped | Teacher | Preschool | | 1/10 | | | |
| | | | Elementary | | 1/12 | | | |
| | | | Secondary | | 1/15 | | | |
| | | | All Grades | | | | | 1/10 |
| | | Occupational Therapist | All Grades | | | | 1/35 | |
| | | Physical Therapist | All Grades | | | | 1/35 | |
| | | Music Teacher | All Grades | | | | 1/75 | |
| | | Phys. Ed. Teacher | All Grades | | | | 1/75 | |
| H23 | Socially Maladjusted | Teacher | Secondary | 1/15 | | | | |

Florida

State Name: **Florida** Special Education Personnel Estimated Requirements/Employment Comparison 1/ Data Period **1968-69**

| Occupation<br>T=Teacher A=Aide<br>Th= Therapist C=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed |
| **T/Blind and Partially Sighted** | **Uncert** | | | | | | | | | | | 3 | | 3 |
| | **Uk** | | | | 9.6 | 3/ | | | | | | 71 | | 71 |
| | **Total** | | 2/ | | 9.6 | 3/ | 15 | 3/ | | | 2/ | 74 | 1/ | 74 |
| **A/Blind and Partially Sighted** | **Uk** | | | | 2/ | 4 | | | | | | | 2/ | 4 |
| **O/Child Care Councelor for B&PS** | **Uk** | | | | | | | | | | | 31 | 2/ | 31 |
| **T/Deaf and Hard of Hearing** | **BA** | | | | | | | | | | | 50 | | 50 |
| | **MA** | | | | | | | | | | | 22 | | 22 |
| | **Uk** | | 47 | 22 | 55 | 65 | 21 | 8 | | | | | | 95 |
| | **Total** | | 47 | 22 | 55 | 65 | 21 | 8 | | | 86 1/ | 72 | 209 1/ | 167 |
| **A/Deaf and Hard of Hearing** | **Uk** | | | | 2/ | 1 | | | | | | | | 1 |
| **O/Psychologist** | **MA** | | | | | 1 | | | | | | | | 1 |
| | **Doc** | | | | | 2 | | | | | | | | 2 |
| | **Total** | | | | 2/ | 3 | | | | | 2.8 | 3/ | 3 1/ | 3 |
| **O/Social Worker** | **BA** | | | | | 5 | | | | | | | | 5 |
| | **MA** | | | | | 1 | | | | | | | | 1 |
| | **Total** | | | | 2/ | 6 | | | | | | | 2/ | 6 |
| **O/Audiologist** | **MA** | | | | | | | | | | 23 | 2 | 23 | 2 |
| **T/Emotionally Disturbed** | **BA** | | | | | 3 | | 2 | | | | | | 5 |
| | **MA** | | | | | 3 | | 1 | | | | | | 4 |
| | **Uk** | | | | 105 | 94 | 16 | 15 | | | 43 | | 164 | 109 |
| | **Total** | | | | 105 | 100 | 16 | 18 | | | 43 | 3/ | 164 | 118 |

**1/Calculation incomplete due to missing data**
**2/ Calculation cannot be made due to missing data**
**3/ Employment data are unavailable**
**Uk - Unknown**

State Name: Florida

Special Education Personnel Estimated Requirements/Employment Comparison1/

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th= Therapist O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| A/Emotionally Disturbed | No Deg |  |  |  |  |  | 2/ | 1 |  |  |  |  | 2/ | 1 |
| Th/Recreational-E.D. | MA |  |  |  | 2/ | 1 |  |  |  |  |  |  | 2/ | 1 |
| A/Recreational Therapist-E.D. | BA |  |  |  | 2/ | 1 |  |  |  |  |  |  | 2/ | 1 |
| T/Mentally Retarded | Uk |  |  |  | 563 1/ | 795 | 355 | 485 |  |  |  |  | 917 1/ | 1280 |
| Th/Speech | Uk |  |  |  |  |  |  |  |  |  | 1117 | 276 | 1117 | 276 |
| T/Specific Learning Disabilities | Uk |  |  |  | 2/ | 59 | 2/ | 3 |  |  | 144 1/ | 3/ | 144 1/ | 62 |
| T/Physically Handicapped | Uk |  | 4 | 2 | 47 | 52 | 13 | 18 |  |  | 302 | 3/ | 366 | 72 |
| Th/Occupational | MA |  |  |  |  | 1 |  |  |  |  |  |  |  | 1 |
|  | Uk |  |  |  |  |  |  |  |  |  |  | 5 |  | 5 |
|  | Total |  |  |  | 2/ | 1 |  |  |  |  | 1 1/ | 5 | 1 1/ | 6 |
| Th/Physical | Uk |  |  |  |  |  |  |  |  |  | 1.7 | 13 | 1.7 | 13 |
| T/Socially Maladjusted | Uk |  |  |  |  |  | 85 | 55 |  |  |  |  | 85 | 55 |
| O/Peripatologist | Uk |  |  |  |  |  |  |  |  |  | 2/ | 3/ | 2/ | 3/ |
| O/Mobility Instructor | Uk |  |  |  |  |  |  |  |  |  | 15 | 3/ | 15 | 3/ |
| T/Music | Uk |  |  |  |  |  |  |  |  |  | .5 1/ | 3/ | .5 1/ | 3/ |
| T/Physical Education | Uk |  |  |  |  |  |  |  |  |  | .5 1/ | 3/ | .5 1/ | 3/ |

1/Calculation incomplete due to missing data
2/ Calculation cannot be made due to missing data
3/ Employment data are unavailable
Uk - Unknown

State Name: Georgia Overview of Special Education Programs Data Period 1968- 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Elementary | | | | | | | | | |
| | | Preschool | Primary | Interme-diate | Secondary | | Residential | Itinerant | No Program Breakdown | | | |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | | 7-10 | 11-14 | 13-16 | | X | | X | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 3-6 | 7-10 | 11-14 | 13-16 | | X | | X | | | |
| H-7 | Emotionally Disturbed | | 7-10 | 11-14 | 13-16 | | X | | X | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 6-9 | 9-13 | 13+ | | X | | X | | | |
| H-10 | TMR | | 6-12 | | 12-18 | | X | | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Impaired | | 7-10 | 11-14 | 13-16 | | | X | | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | 7-10 | 11-14 | 13-16 | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | | | | | | | | | | |
| H-17 | Homebound | | | | | | | | X | | | |
| H-18 | Multiple Handicapped | | | | | | | | X | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state

State Name: Georgia Enrollments In Special Education Data Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Itinerant | Unspecified Program | | | |
| H-3 | Visually Handicapped | Preschool | 87 | | 9 | | | 943 |
| | | Elementary | 66 | | 218 | | | 3307 |
| | | Secondary | 47 | | 144 | | | 1913 |
| H-6 | Hearing Handicapped | Preschool | 96 | | 73 | | | 1232 |
| | | Elementary | 300 | | 161 | | | 10,775 |
| | | Secondary | 140 | | 35 | | | 5125 |
| H-7 | Emotionally Disturbed | Preschool | 6 | | 63 | | | 2850 |
| | | Elementary | 46 | | 113 | | | 7804 |
| | | Secondary | 31 | | | | | 5725 |
| H-8 | Mentally Retarded | Preschool | 12 | | | | | 70 |
| | | Elementary | 54 | | | | | 720 |
| | | Secondary | 9 | | | | | 210 |
| H-9 | EMR | Preschool | 4 | | 2843 | | | 5217 |
| | | Elementary | 28 | | 8470 | | | 19,267 |
| | | Secondary | 38 | | 1867 | | | 17,726 |
| H-10 | TMR | Preschool | 15 | | 28 | | | 1100 |
| | | Elementary | 204 | | 380 | | | 3010 |
| | | Secondary | 311 | | 273 | | | 2198 |
| H-12 | Speech Impaired | Preschool | | 1021 | | | | 6194 |
| | | Elementary | | 8932 | | | | 10,602 |
| | | Secondary | | 825 | | | | 4942 |
| | (cont.) | | | | | | | |

State Name: Georgia Enrollments In Special Education Data Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Itinerant | Unspecified Program | | | |
| H-17 | Homebound | Preschool | | | 107 | | | 536 |
| | | Elementary | | | 459 | | | 545 |
| | | Secondary | | | 410 | | | 477 |
| H-18 | Multiple Handicapped | Preschool | | | 13 | | | 1130 |
| | | Elementary | | | 102 | | | 1523 |
| | | Secondary | | | 42 | | | 1123 |
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Georgia

State Name: Georgia

Personnel/Pupil Contact Ratio

Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Resource Room | Itinerant | Special Class | | |
| H-3 | Visually Handicapped | Teacher | All Grades | 1/6-1/12 | | | | |
| H-6 | Hearing Handicapped | Teacher | Preschool | | | 1/4-1/8 | | |
| | | | Elementary | | | 1/4-1/8 | | |
| | | | All Grades | 1/8-1/6 | 1/4-1/12 | | | |
| H-7 | Emotionally Disturbed | Teacher | Elementary | | | 1/8 | | |
| | | | Elementary | | | 1/10 | | |
| | | | Secondary | | | 1/14 | | |
| H-9 | EMR | Teacher | Elementary | | | 1/13 | | |
| | | | Elementary | | | 1/15 | | |
| | | | Secondary | | | 1/16-1/22 | | |
| H-10 | TMR | Teacher | Elementary | | | 1/8-1/12 | | |
| | | | Secondary | | | 1/8-1/12 | | |
| H-12 | Speech Impaired | Teacher | All Grades | | 1/55-1/80 | | | |
| H-14 | Special Learn. Disabilities | Teacher | All Grades | | | 1/8 | | |
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State Name: Georgia

Special Education Personnel Estimated Requirements/Employment Comparison

Data Period 1968-1969

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | Uk | | | | | | | | | | | 32 | 1/ | 32 |
| T/Hearing Handicapped | Uk | | | | | | | | | | | 57 | 1/ | 57 |
| T/Emotionally Disturbed | Uk | | | | | | | | | | | 27 | 1/ | 27 |
| T/ Mentally Retarded | Uk | | | | | | | | | | | 190 | 1/ | 190 |
| T/EMR | Uk | | | | | | | | | | | 905 | 1/ | 905 |
| T/TMR | Uk | | | | | | | | | | | 159 | 1/ | 159 |
| T/Speech Impaired | Uk | | | | | | | | | | 406-591 | 149 | 406-591 | 149 |
| T/Homebound | Uk | | | | | | | | | | | 57 | 1/ | 57 |
| T/Multiple Handicapped | Uk | | | | | | | | | | | 23 | 1/ | 23 |
| | | | | | | | | | | | | | | |
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1/ Calculation cannot be made due to missing data
Uk - Unknown

State Name: Hawaii Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Unspecified | | Residential | Special School | Day Special Class | Resource Room | Itinerant | |
| H-1 | Blind | 4-6 | 7-12 | 13-20 | | | | X | X | | | |
| H-2 | Partially Sighted | 4-6 | 7-12 | 13-20 | | | | | X | X | X | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 3-6 | 7-12 | 13-20 | | | | X | X | | | |
| H-5 | Hard of Hearing | | 7-12 | 13-20 | | | | | X | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally Handicapped | 4-6 | 7-12 | 13-20 | | | | X | X | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 4-6 | 7-12 | 13-20 | | | X | X | X | | | |
| H-10 | TMR | 4-6 | 7-12 | 13-20 | | | X | X | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Impaired | | | | 4-20 | | | | | | X | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | 3-6 | 7-12 | 13-20 | | | | X* | X | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | 4-6 | 7-12 | 13-20 | | | | X | X | | | |
| H-17 | Homebound | | | | 4-18 | | | | | | X | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

*Private Schools

1/ If no entry is shown, category is not applicable to the state

State Name: Hawaii Enrollments In Special Education Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residen-tial | Special School | Day Special Class | Unknown Local Public | Itinerant | |
| H-1 | Blind | Preschool | | 4 | | | | NOT AVAILABLE |
| | | Elementary | | 9 | | | | |
| | | Secondary | | | 11 | | | |
| H-2 | Partially Sighted | Preschool | | | 7 | | | |
| | | Elementary | | | | 30 | | |
| | | Secondary | | | | 12 | | |
| H-4 | Deaf | Preschool | | 44 | 38 | | | |
| | | Elementary | | 65 | | | | |
| | | Secondary | | 34 | 7 | | | |
| H-5 | Hard of Hearing | Preschool | | | 96 | | | |
| | | Elementary | | | 118 | | | |
| | | Secondary | | | 37 | | | |
| H-7 | Emotionally Handicapped | Preschool | | | 9 | | | |
| | | Elementary | | 22 | 77 | | | |
| | | Secondary | | 46 | 84 | | | |
| H-9 | EMR | Preschool | | | 19 | | | |
| | | Elementary | | 29 | 1137 | | | |
| | | Secondary | | 79 | 966 | | | |
| H-10 | TMR | Preschool | 23 | | | | | |
| | | Elementary | | 42 | 124 | | | |
| | | Secondary | | 41 | 65 | | | |

Hawaii.

State Name: **Hawaii** (Cont.) Enrollments In Special Education Data Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential School | Special School | Day Special Class | Unknown Local Public | Itinerant | |
| H-12 | Speech Impaired | All Grades | | | | | 3064 | NOT AVAILABLE |
| H-14 | Specific Learning Disabilities | Preschool | | 5 | 22 | | | |
| | | Elementary | | 33 | 380 | | | |
| | | Secondary | | | 99 | | | |
| H-16 | Orthopedically Handicapped | Preschool | | 17 | 2 | | | |
| | | Elementary | | 92 | 3 | | | |
| | | Secondary | | 36 | 18 | | | |
| H-17 | Homebound | All Grades | | | | | 114 | |

State Name: Hawaii

Personnel/Pupil Contact Ratio

Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residen-tial | Special School | Day Special Class | Resource Room | Itinerant |
| H-1 | Blind | Teacher | Preschool | | 1/7 | | | |
| | | | Elementary | | 1/9 | | | |
| | | | Secondary | | | 1/10 | | |
| H-2 | Partially Sighted | Teacher | Preschool | | | 1/8 | | |
| | | | Elementary | | | 1/8 | | |
| | | | Secondary | | | | 1/11 | 1/14 |
| H-4 | Deaf | Teacher | Preschool | | 1/6 | 1/8 | | |
| | | | Elementary | | 1/6 | 1/8 | | |
| | | | Secondary | | 1/8 | 1/8 | | |
| H-5 | Hard of Hearing | Teacher | Preschool | | | 1/12 | | |
| | | | Elementary | | 1/6 | 1/13 | | |
| | | | Secondary | | | 1/13 | | |
| H-7 | Emotionally Handicapped | Teacher | Preschool | | | 1/6 | | |
| | | | Elementary | | 1/6 | 1/6 | | |
| | | | Secondary | | 1/8 | 1/9 | | |
| H-9 | EMR | Teacher | Preschool | | | 1/6 | | |
| | | | Elementary | | 1/13 | 1/13 | | |
| | | | Secondary | | 1/14 | 1/16 | | |
| H-10 | TMR | Teacher | Elementary | | 1/11 | 1/12 | | |
| | | | Secondary | | 1/14 | 1/14 | | |
| | | Training Assistant | Preschool | 1/6 | | | | |
| | | | | | | | | |

State Name: Hawaii (Cont.)  Personnel/Pupil Contact Ratio  Data Period 1968-1968

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residen-tial | Special School | Day Special Class | Resource Room | Itinerant |
| H-10 | TMR | Aide | Elementary | | | 1/12 | | |
| | | | Secondary | | | | | 1/75 |
| H-12 | Speech Handicaps | Therapist | Preschool | | 1/5 | 1/7 | | |
| | | | Elementary | | 1/5.5 | 1/9 | | |
| | | | Secondary | | | 1/9 | | |
| H-16 | Orthopedically Handicapped | Teacher | Preschool | | 1/8 | | | |
| | | | Elementary | | 1/8 | 1/9 | | |
| | | | Secondary | | 1/9 | 1/11 | | |
| H-17 | Homebound | Teacher | All Grades | | | | | 1/30 |

State Name: Hawaii

## Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed |
| T/Blind | Uk | X | 5 | 4/ | 1 | 4/ | 1 | 4/ | | | 2/ | 5 | 2.5 | 5 |
| T/Partially Sighted | Uk | X | 1 | 4/ | 2/ | 4/ | 2/ | 4/ | | | 2/ | 3 | 1 3/ | 3 |
| T/Deaf | Uk | X | 8 | 4/ | 10 3/ | 4/ | 5 | 4/ | | | 2/ | 22 | 23 3/ | 22 |
| T/Hard of Hearing | Uk | X | 8 | 4/ | 9 | 4/ | 3 | 4/ | | | 2/ | 7 | 20 | 7 |
| T/Emotionally Handicapped | Uk | X | 2 | 4/ | 17 | 4/ | 15 | 4/ | | | 2/ | 11 | 34 | 11 |
| T/Mentally Retarded | Uk | X | 2 3/ | 4/ | 103 | 4/ | 73 | 4/ | | | 2/ | 236 | 178 3/ | 236 |
| A/TMR | Uk | | | | 10 | 4/ | 5 | 4/ | | | 2/ | 1 | 15 | 1 |
| Th/Speech | Uk | X | | | | | | | | | 41 | 1 | 41 | 1 |
| T/Specific Learning Disabilities | Uk | X | 4 | 1 | 48 | 6 | 11 | 4/ | | | 2/ | 46 | 63 | 53 |
| T/Orthopedically | Uk | X | 2 | 4/ | 12 | 4/ | 6 | 4/ | | | 2/ | 16.5 | 20 | 16.5 |
| T/Regular | Uk | X | | | | | | | | | 3.5 | 3.5 | 3.5 | 3.5 |
| O/Training Assistant in TML | Uk | | 4 | 4 | | | | | | | | | 4 | 4 |

1/ Based upon employment data only (no waiting list data available).

2/ Calculations cannot be made due to missing data.

3/ Calculations incomplete due to missing data.

4/ Employment data unavailable

Uk-Unknown

State Name: Idaho Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Ungraded | | Residential | Spec Ed Classes in Reg School | Itinerant | | | |
| H-1 | Blind | | 5-12 | 12-18 | | | X | | | | | |
| H-2 | Partially Sighted | | 5-12 | 12-18 | | | X | | | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 3-8 | 8-12 | 12-18 | | | X | | | | | |
| H-5 | Hard of Hearing | 3-8 | 8-12 | 12-18 | | | X | | X | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally Disturbed* | | 8-18 | 14-19 | | | X | (Legal delinquents—not necessarily emotionally disturbed) | | | | |
| H-8 | Mentally Retarded ** | $4\frac{1}{2}$-7 | $5\frac{1}{2}$-15 | 13-20 | | | X | | | | | |
| H-9 | EMR | | | | 6-21 | | | X | | | | |
| H-10 | TMR | | | | 6-20 | | | X | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | 6-21 | | | | X | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | | | 6-20 | | | X | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | | | 7-21 | | | X | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

* Delinquents at State Youth Rehabilitation Center

** At Idaho State School and Hospital, mild and moderate

1/ If no entry is shown, category is not applicable to the state.

State Name: Idaho Enrollments In Special Education Date Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type: Residential | Spec Ed Classes in Reg School | Itinerant |  |  | Waiting List |
|---|---|---|---|---|---|---|---|---|
| H-3 | Visually Handicapped | Ungraded | 34 |  |  |  |  | NOT AVAILABLE |
| H-6 | Hearing Handicapped | Ungraded | 124 |  |  |  |  |  |
|  |  | Elementary |  |  | 55 |  |  |  |
| H-7 | Emotionally Disturbed | Ungraded | 286 | (Not valid Emotionally Disturbed data) |  |  |  |  |
| H-8 | Mentally Retarded | Preschool | 5 |  |  |  |  |  |
|  |  | Elementary | 31 |  |  |  |  |  |
|  |  | Secondary | 92 |  |  |  |  |  |
| H-9 | EMR | Elemenary |  | 501 |  |  |  |  |
|  |  | Secondary |  | 535 |  |  |  |  |
| H-10 | TMR | Elementary |  | 94 |  |  |  |  |
|  |  | Secondary |  | 116 |  |  |  |  |
| H-12 | Speech Handicaps | Elementary |  |  | 2241 |  |  |  |
|  |  | Secondary |  |  | 153 |  |  |  |
| H-14 | Special Learning Disabilities | Elementary |  | 47 |  |  |  |  |
|  |  | Secondary |  | 45 |  |  |  |  |
| H-16 | Physically Handicapped | Elementary |  | 25 |  |  |  |  |
|  |  | Secondary |  | 7 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

State Name: Idaho

Personnel/Pupil Contact Ratio

Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential | Spec Ed Classes in Reg School | Itinerant | | |
| H-3 | Visually Handicapped | Teacher | Preschool | 1/16 | | | | |
| | | | Elementary | 1/10 | | | | |
| | | | Secondary | 1/10 | | | | |
| H-3 | | Teacher/Music | Ungraded | 1/70 | | | | |
| H-6 | Hearing Handicapped | Teacher | Preschool | 1/6 | | | | |
| | | | Elementary | 1/8 | | | | |
| | | | Secondary | 1/8 | | | | |
| | | Audiologist | Ungraded | 1/150 | | | | |
| | | Physical Education | Ungraded | 1/70 | | | | |
| H-7 | Emotionally Disturbed | Teacher | Ungraded | 1/12 | | | | |
| | | Social Worker/Counselor | Ungraded | 1/30 | | | | |
| H-9 | EMR | Teacher | Elementary | | 1/12 | | | |
| | | | Secondary | | 1/12 | | | |
| | | | Ungraded | 1/10 | | | | |
| H-10 | TMR | Teacher | Ungraded | 1/8 | | | | |
| H-13 | Speech and Hearing | Therapist | Elementary | | | 1/70 | | |
| | | | Secondary | | | 1/70 | | |
| H-14 | Special Learning Disabilities | Teacher | Elementary | | 1/10 | | | |
| | | | Secondary | | 1/10 | | | |
| H-16 | Physically Handicapped | Teacher | Elementary | | 1/12 | | | |
| | | | Secondary | | 1/12 | | | |
| | | | | | | | | |

State Name: Idaho

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level: Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | BA | X | | | | | | | | 5 | | | | 5 |
| | Total | | | | | | | | 2/ | 5 | | | 2/ | 5 |
| T/Hearing Handicapped | BA | X | | | | | | | | 11 | | | | 11 |
| | MA | X | | | | | | | | 6 | | | | 6 |
| | Total | | | | | | | | 2/ | 17 | | | 2/ | 17 |
| T/Vocational | None | X | | | | | | | | 6 | | | | 6 |
| | BA | X | | | | | | | | 5 | | | | 5 |
| | Total | | | | | | | | 2/ | 11 | | | 2/ | 11 |
| O/Social Worker-Counselor | BA | | | | | | | | | 3 | | | | 3 |
| | Uk | | | | | | | | | 1 | | | | 1 |
| | Total | | | | | | | | 10 | 4 | | | 10 | 4 |
| T/Emotionally Disturbed | None | X | | | | | | | | 1 | | | | 1 |
| | BA | X | | | | | | | | 9 | | | | 9 |
| | MA | X | | | | | | | | 3 | | | 2/ | 3 |
| | Total | | | | | | | | 24 | 13 | | | 24 | 13 |
| T/Mentally Retarded | BA | X | | | | | | | | 5 | | | | 5 |
| | Uk | X | | | | | | | | 111 | | | | 111 |
| | Total | | | | 42 3/ | 4/ | 45 3/ | 4/ | 2/ | 116 | | | 87 3/ | 116 |
| Th/Speech and Hearing | Total | X | | | 32 | 4/ | 2 | 4/ | 2/ | 25 | | | 34 | 25 |
| T/ Learning Disabilities | Total | X | | | 5 | 4/ | 5 | 4/ | 2/ | 4 | | | 10 | 4 |
| T/Physically Handicapped | Total | | | | 2 | 4/ | .5 | 4/ | 2/ | 4 | | | 2.5 | 4 |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations cannot be made due to missing data
3/ Calculations incomplete due to missing data
4/ Employment data unavailable by education level

Uk - Unknown

State Name: Idaho

Special Education Personnel Estimated Requirements/Employment Comparison

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Music | BA | | | | | | | | | 1 | | | | 1 |
| | Total | | | | | | | | .5 | 1 | | | .5 | 1 |
| T/Physical Education | BA | | | | | | | | | 1 | | | | 1 |
| | Total | | | | | | | | 1.8 | 1 | | | 1.8 | 1 |
| O/Audiologist | Total | | | | | | | | | | .8 | 4/ | .8 | 4/ |

4/ Employment data unavailable

Uk - Unknown

State Name: Illinois          Overview of Special Education Programs          Data Period 1967-1968

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Ungraded | | Residential School | | Day Special Class | | Itinerant | |
| H-1 | Blind | 3-5 | 6-13 | 14-21 | | | | | X | | | |
| H-2 | Partially Sighted | 3-5 | 6-13 | 14-21 | | | | | X | | | |
| H-3 | Visually Handicapped | | | | | | X | | | | | |
| H-4 | Deaf | 3-5 | 6-13 | 14-21 | | | | | X | | | |
| H-5 | Hard of Hearing | 3-5 | 6-13 | 14-21 | | | | | X | | | |
| H-6 | Hearing Handicapped | | | | | | X | | | | | |
| H-7 | Emotionally | | 5-13 | 14-21 | | | | | X | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 5-13 | 14-21 | | | | | X | | | |
| H-10 | TMR | | 5-13 | 14-21 | | | | | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | 5-21 | | | | | | X | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | 5-13 | 14-21 | | | | | X | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | 3-5 | 6-13 | 14-21 | | | X | | X | | X | |
| H-17 | Homebound | | | | | | | | | | | |
| H-18 | Multiple Handicapped | 3-5 | 6-13 | 14-21 | | | | | X | | | |
| H-23 | Socially Maladjusted | | 5-13 | 14-21 | | | | | X | | | |

Illinois Department of Public Instruction does have much data on service to children. It is not tabulated in form needed for this study, and so is provided here in summary form.

1/ If no entry is shown, category is not applicable to the state.

State Name: Illinois　　Enrollments In Special Education　　Data Period 1967-1968

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Resi-dential School | | Day Special Class | | Itinerant | |
| H-1 | Blind | Unspecified | | | 120 | | | NOT AVAILABLE |
| H-2 | Partially Sighted | Unspecified | | | 1064 | | | |
| H-3 | Visually Handicapped | Elementary | 90 | | | | | |
| | | Secondary | 66 | | | | | |
| | | Ungraded | 53 | | | | | |
| H-4 | Deaf | Preschool | | | 281 | | | |
| H-6 | Hearing Handicapped | Unspecified | | | 2117 | | | |
| | | Preschool | 21 | | | | | |
| | | Elementary | 257 | | | | | |
| | | Secondary | 155 | | | | | |
| | | Ungraded | 48 | | | | | |
| H-7 | Emotionally Disturbed | Unspecified | | | 280 | | | |
| H-9 | EMR | Unspecified | | | 21941 | | | |
| H-10 | TMR | Unspecified | | | 2678 | | | |
| H-12 | Speech Handicaps | Unspecified | | | | | 84940 | |
| H-14 | Special Learning Disabilities | Unspecified | | | 2762 | | | |
| H-16 | Physically Handicapped | Unspecified | | | 3971 | | 3597 | |
| | | Elementary | 73 | | | | | |
| | | Secondary | 25 | | | | | |
| H-18 | Multiple Handicapped | Unspecified | | | | | | |
| H-23 | Socially Maladjusted | Unspecified | | | | | | |

State Name: Illinois | Personnel/Pupil Contact Ratio | Data Period 1967-1968

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types: Resi-dential School | | Day Special Class | | Itinerant |
|---|---|---|---|---|---|---|---|---|
| H-1 | Blind | Teacher | Preschool | | | 1/8 | | |
| | | | Elementary | 1/8 | | 1/10 | | |
| | | | Secondary | 1/12 | | 1/10 | | |
| H-2 | Partially Sighted | Teacher | Preschool | | | 1/10 | | |
| | | | Elementary | 1/8 | | 1/14 | | |
| | | | Secondary | 1/12 | | 1/14 | | |
| H-4 | Deaf | Teacher | Preschool | | | 1/10 | | |
| | | | Elementary | | | 1/8 | | |
| | | | Secondary | | | 1/8 | | |
| | | T - Nursery-Kindergarten | Preschool | | | 1/10 | | |
| H-6 | Hearing Handicapped | Teacher | Preschool | 1/7 | | 1/8 | | |
| | | | Elementary | 1/7 | | 1/12 | | |
| | | | Secondary | 1/7 | | 1/12 | | |
| H-7 | Emotionally Disturbed | Teacher | Elementary | | | 1/10 | | |
| | | | Secondary | | | 1/10 | | |
| H-9 | EMR | Teacher | Elementary | | | 1/15 | | |
| | | | Secondary | | | 1/20 | | |
| H-10 | TMR | Teacher | Elementary | | | 1/10 (1/15 with Aide) | | |
| | | | Secondary | | | 1/10 (1/15 with Aide) | | |
| | | Aide | Elementary | | | 1/15 | | |
| | | | Secondary | | | 1/15 | | |

State Name: Illinois Personnel/Pupil Contact Ratio Data Period 1967-1968

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  | Resi-dential School | Day Special Class | Resource Room | Itinerant | All Programs |
| H-12 | Speech Handicaps | Therapist | Ungraded |  |  |  | 1/80 yr |  |
| H-14 | Special Learning Disabilities | Teacher | Elementary |  | 1/10 |  |  |  |
|  |  |  | Secondary |  | 1/10 |  |  |  |
| H-16 | Physically Handicapped | Teacher | Preschool | 1/8 | 1/8 |  |  |  |
|  |  |  | Elementary | 1/8 | 1/15 |  |  |  |
|  |  |  | Secondary | 1/8 | 1/15 |  |  |  |
|  |  | Aide | Preschool |  | 1/8 |  |  |  |
|  |  |  | Elementary |  | 1/15 |  |  |  |
|  |  |  | Secondary |  | 1/15 |  |  |  |
|  |  | Therapist (Physical) | Ungraded |  | 1/50 yr |  |  |  |
|  |  | Therapist (Occupational) | Ungraded |  | 1/50 yr |  |  |  |
|  |  | Teacher Home & Hosp. | Ungraded |  |  |  | 1/12 yr |  |
| H-18 | Multiple Handicapped | Teacher | Preschool |  | 1/8 |  |  |  |
|  |  |  | Elementary |  | 1/10 |  |  |  |
|  |  |  | Secondary |  | 1/10 |  |  |  |
|  |  | Aide | Preschool |  | 1/8 |  |  |  |
|  |  |  | Elementary |  | 1/10 |  |  |  |
|  |  |  | Secondary |  | 1/10 |  |  |  |
| H-23 | Socially Maladjusted | Teacher | Elementary |  | 1/20 | 1/10 | 1/10 |  |
|  |  |  | Secondary |  | 1/20 | 1/10 | 1/10 |  |
|  | All Handicaps | School Psychologist | All Grades |  |  |  |  | 1/125 yr |
|  |  | Psychologist Intern. | All Grades |  |  |  |  | 1/60 yr |
|  |  | School Social Worker | All Grades |  |  |  |  | 1/70 yr |

State Name: Illinois    Special Education Personnel Estimated Requirements/Employment Comparison 1/    Data Period 1967 - 1968

| Occupation<br>T=Teacher A = Aide<br>Th=Therapist O = Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind | Uk | X | | | | | | | | | 3/ | 36 | 3/ | 36 |
| T/Partially Sighted | Uk | X | | | | | | | | | 3/ | 106 | 3/ | 106 |
| T/Visually Handicapped | | | | | 11 | 4/ | 6 | 4/ | | | | | 17 | 4/ |
| T/Deaf | Uk | X | 28 | 28 | | | | | | | | | 28 | 28 |
| T/Nursery-Kindergarten/Deaf | Uk | X | 28 | 27 | | | | | | | | | 28 | 27 |
| T/Hearing Handicapped | Uk | X | 3 | 4/ | 37 | 4/ | 22 | 4/ | | | 176 | 167 | 238 | 167 4/ |
| T/Emotionally Disturbed | Uk | X | | | | | | | | | 28 | 42 | 28 | 42 |
| T/EMR | Uk | X | | | | | | | | | 1462 | 1748 | 1462 | 1748 |
| T/TMR | Uk | X | | | | | | | | | 267 | 245 | 267 | 245 |
| A/TMR | Uk | | | | | | | | | | 178 | 2/ | 178 | 2/ |
| Th/Speech Handicaps | Uk | X | | | | | | | 1061 | 878 | | | 1061 | 878 |
| T/Special Learning Disabilities | Uk | X | | | | | | | | | 276 | 304 | 276 | 304 |
| T/Physically Handicapped | Uk | X | | | 9 | 4/ | 3 | 4/ | | | 265 | 162 | 277 | 162 |
| A/Physically Handicapped | Uk | | | | | | | | | | 265 | 2/ | 265 | 2/ |
| Th/Physical | Uk | X | | | | | | | 79 | 54 | | | 79 | 54 |
| Th/Occupational | Uk | X | | | | | | | 79 | 5 | | | 79 | 5 |
| T/Homebound and Hospital | | | | | | | | | 299 | 75 | | | 299 | 75 |
| T/Socially Maladjusted | Uk | X | | | | | | | | | 790 3/ | 811 | 790 3/ | 811 |
| T/Multiple Handicap | Uk | X | | | | | | | | | 9 | 123 | 9 | 123 |
| A/Multiple Handicaps | Uk | | | | | | | | | | 9 | 2/ | 9 | 2/ |

1/ Based upon enrollment data only (no waiting list data available)
2/ Employment data unavailable (total aides for all handicaps equal 515)
3/ Calculations cannot be made due to missing data
4/ Employment data unavailable
Uk - Unknown

State Name: Illinois

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1967 - 1968

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| All Handicaps - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| School Psychologists | Uk | X |  |  |  |  |  |  |  |  | 1123 5/ | 348 | 1123 5/ | 348 |
| Psychologist Interns | Uk | X |  |  |  |  |  |  |  |  | 2340 5/ | 61 | 2340 5/ | 61 |
| School Social Worker | Uk | X |  |  |  |  |  |  |  |  | 2006 | 362 | 2006 5/ | 362 |

1/ Based upon enrollment data only (no waiting list data available)

5/ Calculations incomplete due to missing data

Illinois

State Name: Indiana Overview of Special Education Programs Data Period 1968-69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Elementary | | Secondary | | | | | | | |
| | | Preschool | Primary | Inter-mediate | Jr. High | High | Residential Special Classes | Special Schools | Day Special Class | | | |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | | 6-9 | 9-13 | 13-16 | 16-21 | X | | X | | | |
| H-4 | Deaf | | 6-9 | 9-13 | 13-16 | 16-21 | X | | X | | | |
| H-5 | Hard of Hearing | | 6-9 | 9-13 | 13-16 | 16-21 | | | X | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally | | | | | | | X | X | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 5-6 | 6-9 | 9-13 | 13-16 | 16-21 | | X | X | | | |
| H-10 | TMR | | 6-9 | 9-13 | 13-16 | 16-21 | | X | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | 6-9 | 9-13 | 13-16 | 16-21 | | No Data | | | | |
| H-12 | Speech Handicaps 2/ | | | | | | | | X | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities 3/ | | | | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped 4/ | | 6-9 | 9-13 | 13-16 | 16-21 | | | X | | | |
| H-17 | Homebound | | 6-9 | 9-13 | 13-16 | 16-21 | | | X | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state
2/ Includes most Hard of Hearing
3/ Experimental programs
4/ Includes special health programs

State Name: Indiana Enrollments In Special Education Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Resi-dential Special Class | Special Class | Day Special Class | | | |
| H-3 | Visually Handicapped | Ungraded | 158 | | 198 | | | Not Available |
| H-4 | Deaf | Ungraded | 450 | | 119 | | | |
| H-5 | Hard of Hearing | Ungraded | | | 304 | | | |
| H-7 | Emotionally Disturbed | Ungraded | | 90 | 672 | | | |
| H-9 | EMR | Ungraded | | 72 | 10,352 | | | |
| H-10 | TMR | Ungraded | | 1127 | 1198 | | | |
| H-12 | Speech Handicaps | Ungraded | | | 34,779 | | | |
| H-14 | Special Learning Disabilities | Ungraded | | | 601 | | | |
| H-16 | Physically Handicapped | Ungraded | | | 473 | | | |

State Name: Indiana Personnel/Pupil Contact Ratio Data Period 1968 -69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | |
|---|---|---|---|---|---|---|---|
| | | | | All Programs | | | |
| H-9 | EMR | Teacher | Preschool | 1/10-1/12 | | | |
| | | | Primary | 1/10-1/13 | | | |
| | | | Intermediate | 1/12-1/15 | | | |
| | | | Junior High | 1/12-1/15 | | | |
| | | | High School | 1/15-1/17 | | | |
| H-10 | TMR | Teacher | All Grades | 1/10-1/13 | | | |
| H-12 | Speech Handicaps | Speech and Hearing Ther. | All Grades | 1/5* | | | |
| | | | | | | | |
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* Maximum case load 100 pupils

State Name: Indiana

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed |
| T/Visually Handicapped | Uk | X | | | | | | | | | | 12 | | 12 |
| T/Hearing Handicapped | Uk | X | | | | | | | | | | 16 | | 16 |
| T/Emotionally Disturbed | Uk | X | | | | | | | | | | 35 | | 35 |
| T/EMR | Uk | X | | 137 | | 175 | | 194 | | 250 | | | | 756 |
| Th/Occupational | Uk | | | | | | | | | | | 3 | | 3 |
| T/Brain Injured | Uk | X | | | | | | | | | | 19 | | 19 |
| T/Physically Handicapped | Uk | X | | | | | | | | | | 51 | | 51 |
| Th/Physical | Uk | | | | | | | | | | | 10 | | 10 |
| Th/Speech and Hearing | Uk | | | | | | | | | | | 383 | | 383 |
| T/TMR | Uk | | | | | | | | | | | 101 | | 101 |

1/ Calculations cannot be made due to missing data

Uk - Unknown

State Name: Iowa Overview of Special Education Programs Data Period 1968-1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) |  |  |  |  | Education Program |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Preschool | Elementary | Secondary | Ungraded |  | Residential | Special School | Day Special Class | Resource Room | Itinerant |  |
| H-1 | Blind |  |  |  |  |  |  |  |  |  |  |  |
| H-2 | Partially Sighted |  |  |  |  |  |  |  |  |  |  |  |
| H-3 | Visually Handicapped |  | 6-12 | 13-18 | 6-21 |  | X | X | X | X | X |  |
| H-4 | Deaf |  |  |  |  |  |  |  |  |  |  |  |
| H-5 | Hard of Hearing |  |  |  |  |  |  |  |  |  |  |  |
| H-6 | Hearing Handicapped | 3-5 | 6-12 | 13-18 |  |  | X | X | X | X | X |  |
| H-7 | Emotionally Disturbed |  | 6-12 | 13-18 | 6-21 |  | X | X | X | X | X |  |
| H-8 | Mentally Retarded |  |  |  |  |  |  |  |  |  |  |  |
| H-9 | EMR |  | 6-12 | 13-18 |  |  |  | X | X |  | X |  |
| H-10 | TMR |  | 6-12 | 13-18 |  |  |  | X | X |  | X |  |
| H-11 | MR (Custodial, Severe, Institutional) |  |  |  |  |  |  |  |  |  |  |  |
| H-12 | Speech Handicaps |  |  |  | 6-21 |  |  |  | X | X | X |  |
| H-13 | Speech and Hearing |  |  |  |  |  |  |  |  |  |  |  |
| H-14 | Special Learning Disabilities |  | 6-12 | 13-18 |  |  |  | X | X | X | X |  |
| H-15 | Brain Injured |  |  |  |  |  |  |  |  |  |  |  |
| H-16 | Physically Handicapped |  | 6-12 | 13-18 |  |  |  | X | X | X | X |  |
| H-17 | Homebound |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Age Breakdowns are approximations

1/If no entry is shown, category is not applicable to the state

State Name: Iowa  Enrollments In Special Education  Data Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Special School | Day Special Classes | Resource Room | Itinerant | | |
| H-3 | Visually Handicapped | Unspecified | | | 12 | 59 | | |
| H-6 | Hearing Handicapped | Unspecified | | 84 | | 907 * | | |
| H-7 | Emotionally Disturbed | Unspecified | | 166 | | | | |
| H-9 | EMR | Elementary | | 4938 | | | | |
| | | Secondary | | 3237 | | | | |
| | | Unspecified | | | | 106 | | |
| H-10 | TMR | Elementary | | 926 | | | | |
| | | Secondary | | 191 | | | | |
| H-12 | Speech Handicaps | Unspecified | | | | 17,663 ** | | |
| H-14 | Special Learn. Disabilities | Unspecified | 45 | 29 | 43 | 30 | | |
| H-16 | Physically Handicapped | Unspecified | | 177 | | 220 homebound | | |

* 8847 indirect service
** 7548 improvement programs

State Name: Iowa        Personnel/Pupil Contact Ratio        Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential | Special School | Day Special Class | Resource Room | Itinerant |
| H-3 | Visually Handicapped | Teacher | All Grades | | | | 1/15 | 1/15 |
| H-6 | Hearing Handicapped | Teacher | All Grades | | | 1/8 | 1/8 | 1/8 |
| H-7 | Emotionally Disturbed | Teacher | All Grades | 1/10 | 1/10 | 1/10 | 1/25 * | 1/20* |
| H-9 | EMR | Teacher | All Grades | | 1/20 | 1/20 | 1/15 | 1/20 |
| H-10 | TMR | Teacher | All Grades | | 1/10 | 1/10 | | |
| H-12 | Speech Handicaps | Therapist | All Grades | | | | | 1/50-1/75 |
| H-14 | Special Learn. Disabilities | Teacher | All Grades | | 1/10 | 1/10 | 1/10 | |
| H-16 | Physically Handicapped | Teacher | All Grades | | 1/15 | 1/15 | | |
| | | Teacher-Hospital/Home | All Grades | | | | | 1/15 |

* caseload

State Name: Iowa    Special Education Personnel Estimated Requirements/Employment Comparison 1/    Data Period 1968 -1969

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | Uk | X |  |  |  |  |  |  |  |  | 5 | 8 | 5 | 8 |
| T/Hearing Handicapped | Uk | X |  |  |  |  |  |  |  |  | 124 2/ | 21 | 124 2/ | 21 |
| Th/Hearing | Uk | X |  |  |  |  |  |  |  |  | 1 2/ | 14 | 1 2/ | 14 |
| T/Emotionally Disturbed | Uk | X |  |  |  |  |  |  |  |  | 17 2/ | 20 | 17 2/ | 20 |
| T/Mentally Retarded | Uk | X |  |  |  |  |  |  |  |  | 3/ | 10 | 3/ | 10 |
| T/EMR | None | X |  |  |  |  |  |  |  |  |  | 105 |  | 105 |
|  | BA | X |  |  |  |  |  |  |  |  |  | 406 |  | 406 |
|  | MA | X |  |  |  |  |  |  |  |  |  | 81 |  | 81 |
|  | Total |  |  |  | 247 | 4/ | 162 | 4/ |  |  | 5 2/ | 592 | 414 2/ | 592 |
| T/TMR | None | X |  |  |  |  |  |  |  |  |  | 41 |  | 41 |
|  | BA | X |  |  |  |  |  |  |  |  |  | 81 |  | 81 |
|  | MA | X |  |  |  |  |  |  |  |  |  | 12 |  | 12 |
|  | Total |  |  |  | 93 | 4/ | 19 | 4/ |  |  | 3/ | 134 | 112 2/ | 134 |
| Th/Speech Handicaps | Uk | X |  |  |  |  |  |  |  |  | 8-12 | 240 | 8-12 | 240 |
| T/Special Learn. Disabilities | Uk | X |  |  |  |  |  |  |  |  | 12 2/ | 14 | 12 2/ | 14 |
| T/Physically Handicapped | Uk | X |  |  |  |  |  |  |  |  | 26 2/ | 35 | 26 2/ | 35 |
| Th/Physical | Uk | X |  |  |  |  |  |  |  |  | 3/ | 9 | 3/ | 9 |
| Th/Occupational | Uk | X |  |  |  |  |  |  |  |  | 3/ | 1 | 3/ | 1 |
| O/Psychologists | Uk | X |  |  |  |  |  |  |  |  | 3/ | 148 | 3/ | 148 |
| O/Social Workers | Uk | X |  |  |  |  |  |  |  |  | 3/ | 24 | 3/ | 24 |
| O/Work Study Coordinators | Uk | X |  |  |  |  |  |  |  |  | 3/ | 4 | 3/ | 4 |
| O/Voc. Rehab. Counselors | Uk | X |  |  |  |  |  |  |  |  | 3/ | 18 | 3/ | 18 |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations incomplete due to missing data
3/ Calculations cannot be made due to missing data
4/ Employment data unavailable
Uk - Unknown

State Name: Kansas Overview of Special Education Programs Data Period -

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Ungraded | | Residential | | Day Special Class | | Resource Room | Itinerant |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | no min -5 | 6-12 | 13-21 | | | X | | X | | X | X |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | no min -5 | 6-12 | 13-21 | | | X | | X | | | X |
| H-7 | Emotionally Disturbed | no min -5 | 6-12 | 13-21 | | | X | | X | | X | X |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 6-12 | 13-21 | | | | | X | | | |
| H-10 | TMR | | 6-12 | 13-21 | | | | | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | 5-21 | | X | | | | | |
| H-12 | Speech Handicaps | | 6-12 | 13-21 | | | | | | | | X |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | 6-12 | 13-21 | | | X | | X | | X | X |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | no min -5 | 6-12 | 13-21 | | | X | | X | | X | X |
| H-17 | Homebound | | | | | | | | | | | |
| H-18 | Deaf-Blind Multiple | no min -5 | 6-12 | 13-21 | | | | | | | | X |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state.

State Name: Kansas    Enrollments In Special Education    Data Period -

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Day Special Class | Resource | Itinerant | All Programs | |
| H-3 | Visually Handicapped | Elementary | 66 | | | | | NOT AVAILABLE IN ANY COMPLETE FORM-COULD ONLY BE ESTIMATED FOR SOME HANDICAPS |
| | | Secondary | 84 | | | | | |
| | | Unspecified | | 184 | | 116 | | |
| H-6 | Hearing Handicaps | Preschool | | 50 | | | | |
| | | Elementary | 265 | 74 | | 15 | | |
| | | Secondary | 65 | 12 | | 9 | | |
| H-7 | Emotionally Disturbed | Unspecified | 845 | 155 | | 126 | | |
| H-9 | EMR | Elementary | | 3176 | | | | |
| | | Secondary | | 1314 | | | | |
| H-10 | TMR | Unspecified | | 296 | | | | |
| H-11 | Mentally Retarded | Ungraded | 583 | | | | | |
| H-12 | Speech Handicaps | Unspecified | | | | 16,220 | | |
| H-14 | Special Learning Disabilities | Elementary | | 82 | | 134 | | |
| | | Secondary | 35 | 34 | | 94 | | |

State Name: Kansas Personnel/Pupil Contact Ratio Data Period -

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential | Day Special Class | Resource | Itinerant | |
| H-3 | Visually Handicapped | Teacher | Preschool | | | | 1/6 | |
| | | | Elementary | 1/5 | | | | |
| | | | Secondary | 1/5 | 1/6-14 | 1/6-14 | 1/10-35 per week | |
| H-6 | Hearing Handicaps | Para-Professional | Preschool | | | | 1/3 | |
| | | Teacher | Preschool | | 1/6 | | | |
| | | | Elementary | 1/7 | 1/10 | | 1/10 per week | |
| | | | Secondary | 1/7 | 1/10 | | 1/10 per week | |
| H-7 | Emotionally Disturbed | Teacher | Preschool | | 1/6 | | | |
| | | | Elementary | 1/8 | 1/8 | 1/8 | 1/12 per week | |
| | | | Secondary | 1/8 | 1/8 | 1/8 | 1/12 per week | |
| H-9 | EMR | Teacher | Elementary | | 1/9-15 | | | |
| | | | Secondary | | 1/9-15 | | | |
| | | Work Placement Consultant | Secondary | | 1/40 case load | | | |
| H-10 | TMR | Teacher | Elementary | | 1/5-8 | | | |
| | | | Secondary | | 1/5-8 | | | |
| H-11 | Mentally Retarded | Teacher | Ungraded | 1/5* | | | | |
| H-14 | Special Learning Disabilities | Teacher | Elementary | 1/13 | 1/13 | 1/13 | 1/15 per week | |
| | | | Secondary | | 1/13 | 1/13 | 1/15 per week | |
| H-16 | Physically Handicapped | Teacher | Elementary | 1/5-14 | 1/5-14 | 1/5-14 | 1/5-14 per week | |
| | | | Secondary | 1/5-14 | 1/5-14 | 1/5-14 | 1/5-14 per week | |
| H-18 | Deaf-Blind Multiple | Teacher | Ungraded | | | | 1/1 | |

*estimated for purposes of study-not sure about ratio

State Name: Kansas

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period -

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed |
| T/Visually Handicapped | Total | X | 2/ | 1 | 13 3/ | 10 | 16 | 16 | | | | 15 | 29 3/ | 27 |
| O/Para-Professional-Vis. Hdcp. | None | | 2/ | 2 | | | | | | | | | 2/ | 2 |
| T/Hearing Handicapped | BA | X | | 3 | | 9 | | 6 | | | | | | 18 |
| | MA | X | | 4 | | 14 | | 7 | | | | | | 25 |
| | Uk | | | | | 12 | | 10 | | | | | | 22 |
| | Total | | 8 | 7 | 47 | 35 | 11 | 23 | | | | | 66 | 65 |
| T/Emotionally Disturbed | Uk | X | | | | 3 | | 3 | | 2 | | 6 | | 14 |
| | BA | X | | 1 | | 13 | | 40 | | | | 11 | | 65 |
| | MA | X | | | | 12 | | 22 | | | | 1 | | 35 |
| | Total | | 2/ | 1 | 2/ | 28 | 2/ | 75 | 2/ | 2 | 146 3/ | 18 | 146 3/ | 124 |
| T/EMR | BA | X | | | | 179 | | 92 | | | | | | 271 |
| | MA | X | | | | 40 | | 24 | | | | | | 64 |
| | Total | | | | 211-352 | 219 | 87-146 | 116 | | | | | 298-498 | 335 |
| O/Para-Professional EMR | Total | | | | 2/ | 2 | | | | | | | 2/ | 2 |
| A/EMR | Total | | | | 2/ | 2 | 2/ | 2 | | | | | 2/ | 2 |
| T/TMR | BA | X | | | | 9 | | 12 | | | | | | 21 |
| | MA | X | | | | 3 | | | | | | | | 3 |
| | Total | | | | | 12 | | 12 | | | 37-59 | | 37-59 | 24 |
| A/TMR | Total | | | | 2/ | 8 | | | | | | | 2/ | 8 |
| T/Mentally Retarded | Uk | X | | | | | | | | 6 | | | | |
| | BA | X | | | | | | | | 9 | | | | |

1/ Based upon enrollment only (no waiting list data available)
2/ Calculations cannot be made due to missing data
3/ Calculations incomplete due to missing data
Uk-Unknown

State Name: Kansas Special Education Personnel Estimated Requirements/Employment Comparison 1/ Data Period -

| Occupation | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| Th/Speech | BA | X | | | | | | | | | | 102 | | 102 |
| | MA | X | | | | | | | | | | 52 | | 52 |
| | Total | | | | | | | | | | 216-1081 | 154 | 216-1081 | 154 |
| T/Special Learning Disabilities | BA | X | | | | 9 | | 1 | | | | | | 10 |
| | MA | X | | | | 7 | | 6 | | | | | | 13 |
| | Total | | | | 15 3/ | 16 | 9 | 7 | | | | | 24 3/ | 23 |
| T/Physically Handicapped | Uk | X | | | | | | | | | 29-81 3/ | 41 | 29-81 3/ | 41 |
| T/Multiple Handicapped | Uk | | | | | | | | | | 32 | 4/ | 32 | 4/ |

1/ Based upon enrollment only (no waiting list data available)
3/ Calculations incomplete due to missing data
4/ Employment data unavailable
Uk-Unknown

State Name: Kentucky Overview of Special Education Programs Data Period1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | All Grades | | Residential | Special School | Day Special Class | Itinerant | | |
| H-1 | Blind | 5-7* | 8-13* | 14-21* | | | X | | | | | |
| H-2 | Partially Seeing | | 6-13 | 14-21 | | | | | X | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf 2/ | 3-5* | 6-13 | 13-21 | 6-21 | | X | | X | | | |
| H-5 | Hard of Hearing | | 6-13 | 14-21 | | | | | X | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally Disturbed | 5-9* | 10-13*<br>6-13 | 14-21 | | | X | | X | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 6-13 | 14-21 | 6-21 | | X | | X | | | |
| H-10 | TMR | | | | 6-21 | | X | X | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | | | | | | | | |
| H-13 | Speech and Hearing | | | | 6-21 | | | | | X | | |
| H-14 | Special Learning Disabilities 3/ | | 6-13 | 14-21 | | | | | X | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped 4/ | | 6-13 | 14-21 | 6-21 | | X | | X | | | |
| H-17 | Homebound 5/ | | | | 6-21 | | | | | X | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state

2/ Includes severely Hard of Hearing

3/ Called "neurologically impaired"

4/ Called "orthopedically handicapped"

5/ Includes hospital teaching

*Age range for institutions

State Name: Kentucky

Enrollments In Special Education

Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Enrollment Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Special School | Day Special Class | Itinerant | Waiting for Diagnosis | |
| H-1 | Blind | Preschool | 30 | | | | | |
| | | Elementary | 55 | | | | | |
| | | Secondary | 76 | | | | | |
| H-2 | Partially Seeing | Elementary | | | 31 | | | |
| | | Secondary | | | 16 | | | DATA INCOMPLETE |
| | | Unspecified | | | 4 | | | |
| H-4 | Deaf and Severely Hard of Hearing | Preschool | 8 | | | | | |
| | | Elementary | 264 | | 34 | | | |
| | | Secondary | 52 | | 23 | | | |
| H-5 | Hard of Hearing | Elementary | | | 19 | | | |
| | | Secondary | | | 30 | | | |
| H-7 | Emotionally Disturbed | Preschool | 5 | | | | | |
| | | Elementary | 7 | | | | | |
| | | Secondary | 11 | | | | | |
| | | Unspecified | | | 14 | | | |
| H-9 | EMR | Elementary | | | 5539 | | | |
| | | Secondary | | | 2606 | | | |
| | | Unspecified | 129 | | | | | |
| H-10 | TMR | Unspecified | 287 | 170 | 674 | | 166 | 50 (institutions) |
| H-13 | Speech and Hearing Handicaps | Unspecified | | | | 9647 | | |
| H-14 | Neurologically Impaired | Unspecified | | | 314 | | | |

(continued)

State Name: Kentucky

Enrollments In Special Education

Data Period1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type |  |  |  |  | Enrollment |
|---|---|---|---|---|---|---|---|---|
|  |  |  | Residen-tial Special Class | Special School | Day Special Class | Itinerant | Waiting for Diagnosis | Waiting List |
| H-16 | Crippled and Special Health, Problems | Elementary |  |  | 81 |  |  |  |
|  |  | Secondary |  |  | 83 |  |  |  |
|  |  | Unspecified | 35 |  |  | 279 |  |  |
|  |  |  |  |  |  |  |  |  |
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DATA INCOMPLETE

State Name: Kentucky Personnel/Pupil Contact Ratio Data Period 1968- 1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential Special Class | Special School | Day Special Class | Itinerant | |
| H-1 | Blind | Teacher | Preschool | 1/5 | | | | |
| | | | Elementary | 1/7 | | | | |
| | | | Secondary | 1/10 | | | | |
| H-2 | Partially Sighted | Teacher | All Grades | | | 1/10 | | |
| H-4 | Deaf and Severely Hard of Hearing | Teacher | Preschool | 1/6 | | | | |
| | | | Elementary | 1/6 | | 1/12 | | |
| | | | Secondary | 1/8 | | 1/12 | | |
| | | Audiometrist | All Grades | 1/300 | | | | |
| H-5 | Hard of Hearing | Teacher | All Grades | | | 1/20 | | |
| H-7 | Emotionally Disturbed | Teacher | All Grades | 1/4 | | 1/10 | | |
| | | Speech Therapist | All Grades | 1/25 | | | | |
| | | Psychologist | All Grades | 1/100 | | | | |
| H-9 | EMR | Teacher | All Grades | 1/10 | | 1/20 | | |
| H-10 | TMR | Teacher | All Grades | 1/5 | 1/12 | 1/12 | | |
| H-13 | Speech and Hearing | Therapist | All Grades | | | | 1/100 | |
| H-14 | Neurologically Impaired | Teacher | All Grades | | | 1/8 | | |
| H-16 | Physically Handicapped* | Orthopedic Teacher | All Grades | | | 1/20 | 1/12 | |
| H-18 | Multiple Handicap | Teacher (EMR) | All Grades | 1/8 | | | | |
| | Multiple Handicap | Teacher (TMR) | All Grades | 1/6 | | | | |
| | | | | | | | | |
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* Crippled and Special Health Problems

Kentucky

State Name: Kentucky

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind | BA | X |  |  |  | 8 |  | 6 |  |  |  |  |  | 14 |
|  | MA | X |  |  |  | 1 |  | 1 |  |  |  |  |  | 2 |
|  | Total |  | 6 | 3/ | 8 | 9 | 8 | 7 |  |  |  |  | 2.2 | 16 |
| T/Physical Education for Blind | BA | X |  |  |  | 1 |  | 1 |  |  |  |  |  | 2 |
|  | Total |  |  |  | 2/ | 1 | 2/ | 1 |  |  |  |  | 2/ | 2 |
| T/Music Teacher for Blind | BA | X |  |  |  | 1 |  | 1 |  |  |  |  |  | 2 |
|  | Total |  |  |  | 2/ | 1 | 2/ | 1 |  |  |  |  | 2/ | 2 |
| T/Art Teacher for Blind | BA | X |  |  |  |  |  | 1 |  |  |  |  |  | 1 |
|  | Total |  |  |  |  |  |  | 1 |  |  |  |  | 2/ | 1 |
| O/Peripatologist | BA | X |  |  |  |  |  | 1 |  |  |  |  |  | 1 |
|  | Total |  |  |  |  |  |  | 1 |  |  |  |  | 2/ | 1 |
| T/Partially Sighted | BA | X |  |  |  | 2 |  | 2 |  |  |  |  |  | 4 |
|  | MA | X |  |  |  | 2 |  |  |  |  |  |  |  | 2 |
|  | Total |  | 3 | 3/ | 2 | 4 | 1 | 2 |  |  |  |  | 6 | 6 |
| T/Deaf |  |  |  |  |  | 4 |  |  |  |  |  |  |  | 4 |
|  | BA |  |  | 1 |  | 16 |  | 5 |  |  |  |  |  | 22 |
|  | MA |  |  |  |  | 8 |  | 4 |  |  |  |  |  | 12 |
|  | Total |  | 1 | 1 | 47 | 28 | 8 | 9 |  |  |  |  | 56 | 38 |
| T/Vocational Teacher for Deaf | None | X |  |  |  | 5 |  |  |  |  |  |  |  | 5 |
|  | BA | X |  |  |  | 5 |  |  |  |  |  |  |  | 5 |
|  | Total |  |  |  |  | 10 |  |  |  |  |  |  | 2/ | 10 |

1/ Based upon enrollment data only (no waiting list data available).

Uk-Unknown

2/ Calculations cannot be made due to missing data

3/ Employment data unavailable

Kentucky

State Name: Kentucky

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level<br>Preschool<br>Esti-mated | <br>Preschool<br>Employed | <br>Elementary<br>Esti-mated | <br>Elementary<br>Employed | <br>Secondary<br>Esti-mated | <br>Secondary<br>Employed | <br>Ungraded<br>Esti-mated | <br>Ungraded<br>Employed | <br>Unspecified<br>Esti-mated | <br>Unspecified<br>Employed | <br>Total<br>Esti-mated | <br>Total<br>Employed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A/Deaf | UK | | | | | | | | | | 2/ | 3 | 2/ | 3 |
| O/Vocational Counselor for Deaf | UK | | | | | | 2/ | 2 | | | 2/ | 2 | 2/ | 2 |
| O/Audiometrist | MA | X | | | 1 | | | | | | | 1 | | 1 |
| | Total | | | | 1 | 4/ | | | | | 2/ | 1 | 1 3/ | 1 |
| T/Hard of Hearing | BA | X | | | | 1 | | 2 | | | | | | 3 |
| | MA | X | | | | 1 | | 2 | | | | | | 3 |
| | Total | | | | 1 | 2 | 2 | 4 | | | | | 3 | 6 |
| T/Emotionally Disturbed | | | | | | | | 1 | | | | 2 | | 3 |
| | None | X | | | | | | 1 | | | | | | 1 |
| | BA | X | | 1 | | 1 | | 3 | | | | | | 5 |
| | MA | X | | | | 3 | | | | | | | | 3 |
| | Total | | 1 | 1 | 2 | 4 | 3 | 5 | | 4/ | 2/ | 2 | 6 | 12 |
| O/Psychologist | MA | X | | | | | | | | | | 1 | | 1 |
| | Total | | | | | | | | | | 1 | 1 | 1 | 1 |
| T/EMR | None | X | | | | 14 | | 2 | | | | 24 | | 40 |
| | BA | X | | | | 230 | | 114 | | | | 7 | | 351 |
| | MA | X | | | | 54 | | 24 | | | | 15 | | 93 |
| | UK | X | | | | | | | | | | 6 | | 6 |
| | Total | | | | 276 | 298 | 130 | 140 | | | 17 | 52 | 423 | 490 |
| T/TMR | None | | | | | | | | | | | 1 | | 1 |
| | BA | | | | | | | | | | | 71 | | 71 |

1/ Based upon enrollment data only (no waiting list data available)

4/ Employment data unavailable

Uk-Unknown

2/ Calculation cannot be made due to missing data

3/ Calculation incomplete due to missing data

State Name: Kentucky Special Education Personnel Estimated Requirements/Employment Comparison 1/ Data Period 1968-1969

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/TMR (cont.) | MA |  |  |  |  |  |  |  |  |  |  | 11 |  | 11 |
|  | Total |  |  |  |  |  |  |  |  |  | 127 | 83 | 127 | 83 |
| A/Mentally Retarded | Uk |  |  |  |  |  |  |  |  |  | 3/ | 26 | 3/ | 26 |
| Th/Speech and Hearing | None |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
|  | BA |  |  |  |  |  |  |  |  |  |  | 65 |  | 65 |
|  | MA |  |  |  |  |  |  |  |  |  |  | 24 |  | 24 |
|  | Dr. |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
|  | Total |  |  |  |  |  |  |  |  |  | 98 | 91 | 98 | 91 |
| T/Neurologically Impaired | BA |  |  |  |  |  |  |  |  |  |  | 8 |  | 8 |
|  | MA |  |  |  |  |  |  |  |  |  |  | 11 |  | 11 |
|  | Total |  |  |  |  |  |  |  |  |  | 39 | 19 | 39 | 19 |
| T/Orthopedically Impaired | None |  |  |  |  | 1 |  |  |  |  |  | 5 |  | 6 |
|  | BA |  |  |  |  | 6 |  | 5 |  |  |  | 73 |  | 84 |
|  | MA |  |  |  |  |  |  | 2 |  |  |  | 18 |  | 20 |
|  | Uk |  |  |  |  |  |  |  |  |  |  | 2 |  | 2 |
|  | Total |  |  |  | 4 | 7 | 4 | 7 |  |  | 23 2/ | 98 | 31 2/ | 112 |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculation cannot be made due to missing data
3/ Calculation incomplete due to missing data
Uk-Unknown

State Name: Louisiana Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | | | Residential Special | | Day Special | | | |
| H-1 | Blind | 3-5 | 6-11 | 12-21 | | | X | | X | | | |
| H-2 | Partially Sighted | 3-5 | 6-11 | 12-21 | | | | | X | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 3-5 | 6-11 | 12-21 | | | X | | X | | | |
| H-5 | Hard of Hearing | 3-5 | 6-11 | 12-21 | | | | | X | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally Disturbed | 3-5 | 6-11 | 12-21 | | | | | X | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 5-6 | 7-15 | 14-21 | | | | | X | | | |
| H-10 | TMR | 5-6 | 7-15 | 16-21 | | | | | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | 3-5 | 6-11 | 12-21 | | | | | X | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | 3-5 | 6-11 | 12-21 | | | | | X | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | 3-5 | 6-11 | 12-21 | | | X | | X | | | |
| H-17 | Homebound | | | | | | | | | | | |
| H-28 | Cerebral Palsy | | | | | | | | X | | | |
| H-29 | Slow Learner | 3-5 | 6-11 | 12-21 | | | | | X | | | |
| | | | | | | | | | | | | |

Louisiana

1/ If no entry is shown, category is not applicable to the state.

State Name: Louisiana Enrollments In Special Education Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special | | Day Special | | No Program Breakdown | |
| H-1 | Blind | Ungraded | 241 | | 121 | | | |
| H-2 | Partially Sighted | Ungraded | 241 | | 121 | | | |
| H-3 | Visually Handicapped | Ungraded | 538 | | 137 | | | |
| H-4 | Deaf | Ungraded | 538 | | 137 | | | |
| H-7 | Emotionally Disturbed | Ungraded | | | 332 | | | |
| H-9 | EMR | Ungraded | | | 6,553 | | | NOT AVAILABLE |
| H-10 | TMR | Ungraded | | | 708 | | | |
| H-13 | Speech and Hearing | Elementary | | | | | 20,413 | |
| | | Secondary | | | | | 1,678 | |
| H-14 | Special Learning Disabilities | Ungraded | | | 561 | | | |
| H-16 | Physically Handicapped | Ungraded | 295 | | 260 | | | |
| H-29 | Slow Learner | Ungraded | | | 1,524 | | | |

Louisiana

State Name: Louisiana

Personnel/Pupil Contact Ratio

Data Period 1968 - 1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | All Programs | | | | |
| H-1 | Blind | Teacher | All Grades | 1/8-1/10 | | | | |
| H-2 | Partially Sighted | Teacher | All Grades | 1/8-1/10 | | | | |
| H-4 | Deaf | Teacher | All Grades | 1/9-1/10 | | | | |
| H-5 | Hard of Hearing | Teacher | All Grades | 1/8-1/10 | | | | |
| H-7 | Emotionally Disturbed | Teacher | All Grades | 1/8-1/10 | | | | |
| H-9 | EMR | Teacher | All Grades | 1/10-1/15 | | | | |
| H-10 | TMR | Teacher | All Grades | 1/8-1/12 | | | | |
| H-12 | Speech Handicaps | Therapist | All Grades | 1/100 | | | | |
| H-16 | Physically Handicapped | Teacher | All Grades | 1/8-1/10 | | | | |
| H-29 | Slow Learner | Teacher | All Grades | 1/12-1/18 | | | | |

State Name: Louisiana

## Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968 - 1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated 4/ | Employed | Estimated | Employed |
| T/Visually Handicapped | Total | | | | | | | | | | 36-45 | 3/ | 36-45 | 3/ |
| T/Hearing Handicapped | Total | | | | | | | | | | 67-84 | 100 | 67-84 | 100 |
| T/Emotionally Disturbed | Total | | | | | | | | | | 33-41 | 25 | 33-41 | 25 |
| T/EMR | Total | | | | | | | | | | 436-819 | 546 | 436-819 | 546 |
| T/TMR | Total | | | | | | | | | | 59-88 | 68 | 59-88 | 68 |
| T/Speech | Total | | | | 204 | 3/ | 17 | 3/ | | | | | 221 | 3/ |
| T/Physically Handicapped | Total | | | | | | | | | | 85-127 | 57 | 85-127 | 57 |
| T/Slow Learners | Total | | | | | | | | | | 2/ | 99 | 2/ | 99 |
| T/Speech Handicaps | Total | | | | | | | | | | 2/ | 57 | 2/ | 57 |
| T/Special Learning Disabilities | Total | | | | | | | | | | 2/ | 34 | 2/ | 34 |

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1/ Based upon enrollment data only (no waiting list data available).

2/ Calculation cannot be made due to missing data.

3/ Employment data unavailable.

4/ Dual personnel/pupil contact ratios.

NO SPECIAL EDUCATION DATA WAS PROVIDED BY THE STATE OF MAINE

State Name: Maryland. Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool (Experimental) | Primary (1-3) | Intermediate (4-6) | Secondary | Ungraded | Residential Special Class | Special Schools | Day Special Class | Cooperative Special Class | Itinerant | |
| H-1 | Blind | 4-5 | 6-9 | 9-12 | 13-21 | | | | | | | |
| H-2 | Partially Sighted | 4-5 | 6-9 | 9-12 | 13-21 | | | | | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 4-5 | 6-9 | 9-12 | 13-21 | | X | X | | | X | |
| H-7 | Emotionally Handicapped | 4-5 | 6-9 | 9-12 | 13-21 | 6-21 | X | | X | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 4-5 | 6-9 | 9-12 | 13-21 | | X | | X | | | |
| H-10 | TMR | 4-5 | 6-9 | 9-12 | 13-21 | | X | | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | 4-5 | 6-9 | 9-12 | 13-21 | | | | X | | X | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | 4-5 | 6-9 | 9-12 | 13-21 | | | | X | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | 4-5 | 6-9 | 9-12 | 13-21 | | | | X | X | | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state.

Maryland

State Name: Maryland    Personnel/Pupil Contact Ratio    Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Day Special Class | Cooperative Special Class | Itinerant | Resource Room | |
| H-1 | Blind | Teacher | Primary | 1/7 | | | | |
| | | | Intermediate | 1/10 | | | | |
| | | | Secondary | 1/12 | | | | |
| | | | Ungraded | | | 1/7 | | |
| | | Aide | Primary | 1/7 | | | | |
| | | | Intermediate | 1/10 | | | | |
| | | | Secondary | 1/12 | | | | |
| H-2 | Partially Sighted | Teacher | Primary | 1/7 | | | | |
| | | | Intermediate | 1/12 | | | | |
| | | | Secondary | 1/15 | | | | |
| | | | Ungraded | | | 1/20 | | |
| H-4 | Deaf | Teacher | Unknown | 1/7 | | | | |
| | | Aide | Unknown | 1/3.5 | | | | |
| H-5 | Hard of Hearing | Teacher | Unknown | 1/10 | | | | |
| | | Aide | Unknown | 1/5 | | | | |
| H-7 | Emotionally Handicapped | Teacher | Primary | | 1/10 | | 1/10 | |
| | | | Intermediate | | 1/12 | | 1/12 | |
| | | | Secondary | | 1/15 | | 1/15 | |
| H-9 | EMR | Teacher | Primary | 1/10 | | | | |
| | | | Intermediate | 1/15 | | | | |
| | | | Secondary | 1/20 | | | | |
| | | | Ungraded | | | | 1/30 | |

Maryland

State Name: Maryland    Personnel/Pupil Contact Ratio (cont.)    Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Day Special Class | Coopera-tive Special Class | Itinerant | Resource Room | |
| H-10 | TMR | Teacher | Primary | 1/7 | | | | |
| | | | Intermediate | 1/10 | | | | |
| | | | Secondary | 1/12 | | | | |
| | | Aide | Primary | 1/7 | | | | |
| | | | Intermediate | 1/10 | | | | |
| | | | Secondary | 1/12 | | | | |
| H-12 | Speech Handicaps | Therapist | Ungraded | | | 1/80 | | |
| H-14 | Special Learning Disabilities | Teacher | Primary | 1/10 | | | | |
| | | | Intermediate | 1/10 | | | | |
| | | | Secondary | 1/15 | | | | |
| | | Aide | Primary | 1/15 | | | | |
| | | | Intermediate | 1/15 | | | | |
| H-16 | Physically Handicapped | Teacher | Primary | 1/7 | | | | |
| | | | Intermediate | 1/10 | | | | |
| | | | Secondary | 1/15 | | | | |
| | | Aide | Primary | 1/7 | | | | |
| | | | Intermediate | 1/10 | | | | |
| | | | Secondary | 1/15 | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

State Name: Maryland Enrollments In Special Education Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Special Schools | Day Special Class | Cooperative Special Class | Itinerant | |
| H-2 | Partially Sighted | Primary | | | 58 | | | NOT AVAILABLE |
| | | Intermediate | | | 4 | | | |
| | | Secondary | | | 39 | | | |
| H-6 | Hearing Handicapped | Preschool | 12 | | | | 70 | |
| | | Primary | 215 | 316 | | | 329 | |
| | | Intermediate | | 177 | | | 143 | |
| | | Secondary | 83 | 89 | | | 107 | |
| H-7 | Emotionally Handicapped | Primary | | | 247 | | | |
| | | Intermediate | | | 209 | | | |
| | | Secondary | | | 45 | | | |
| | | Ungraded | | | 20 | | | |
| H-9 | EMR | Primary | 83 | | 5,087 | | | |
| | | Intermediate | | | 6,107 | | | |
| | | Secondary | 294 | | 8,296 | | | |
| H-10 | TMR | Primary | 142 | | 1,499 | | | |
| | | Intermediate | | | 693 | | | |
| | | Secondary | | | 659 | | | |
| H-12 | Speech Handicaps | Primary | | | 181 | | 25,000 | |
| | | Intermediate | | | 51 | | | |
| H-14 | Special Learning Disabilities | Primary | | | 1,964 | | | |
| | | Intermediate | | | 505 | | | |

(Cont.)

State Name: Maryland Enrollments In Special Education (Cont.) Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Special Schools | Day Special Class | Cooperative Special Class | Itinerant | |
| H-14 | Special Learning Disabilities (cont.) | Secondary | | | 1,036 | | | NOT AVAILABLE |
| H-16 | Physically Handicapped | Primary | | | 314 | 82 | | |
| | | Intermediate | | | 71 | | | |

State Name: Maryland

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind | Uk |  |  |  |  |  |  |  |  |  |  |  | 2/ | 3/ |
| A/Blind | Uk |  |  |  |  |  |  |  |  |  |  |  | 2/ | 3/ |
| T/Partially Sighted | Uk |  |  |  | 9 | 3/ | 3 | 3/ |  |  |  |  | 12 4/ | 3/ |
| T/Deaf | Uk |  |  |  |  |  |  |  |  |  |  |  | 2/ | 3/ |
| A/Deaf | Uk |  |  |  |  |  |  |  |  |  |  |  | 2/ | 3/ |
| T/Hard of Hearing | Uk |  |  |  |  |  |  |  |  |  |  |  | 2/ | 3/ |
| A/Hard of Hearing | Uk |  |  |  |  |  |  |  |  |  |  |  | 2/ | 3/ |
| T/Emotionally Disturbed | Uk |  |  |  |  |  |  |  |  |  |  |  | 2/ | 3/ |
| T/EMR | Uk |  |  |  | 1018 4/ | 3/ | 414 4/ | 3/ |  |  |  |  | 1442 4/ | 3/ |
| T/TMR | Uk |  |  |  | 283 4/ | 3/ | 55 | 3/ |  |  |  |  | 338 4/ | 3/ |
| A/TMR | Uk |  |  |  | 283 4/ | 3/ | 55 | 3/ |  |  |  |  | 338 | 3/ |
| Th/Speech | Uk |  |  |  |  |  |  |  | 312 | 3/ |  |  | 312 4/ | 3/ |
| T/Special Learning Disabilities | Uk |  |  |  | 247 | 3/ | 70 | 3/ |  |  |  |  | 317 | 3/ |
| A/Special Learning Disabilities | Uk |  |  |  | 165 | 3/ |  |  |  |  |  |  | 165 | 3/ |
| T/Orthopedically Handicapped | Uk |  |  |  | 52 4/ | 3/ |  |  |  |  |  |  | 52 4/ | 3/ |
| A/Orthopedically Handicapped | Uk |  |  |  | 52 | 3/ |  |  |  |  |  |  | 52 4/ | 3/ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1/ Based upon employment data only (no waiting list data available)

2/ Calculations cannot be made due to missing data

3/ Employment data unavailable

4/ Calculations incomplete due to missing data

Uk - Unknown

State Name: Massachusetts Overview of Special Education Programs

Data Period 1968-1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | | Education Program | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Pre-school | Elementary | | Secondary | | Un-graded | Residential Class | Special Schools | Day Special Class | Coop. Class | Resource Room | Itinerant | Supplementary Inst. |
| | | | Pri. | Inter. | Jr. H. | Sr. H. | | | | | | | | |
| H-1 | Blind | pvt 3-6 | 6-12 | | 13-21 | | | X | | X | | X | X | X |
| H-2 | Partially Sighted | | 6-12 | | 13-21 | | | | | X | X | X | X | X |
| H-3 | Visually Handicapped | | | | | | | | | | | | | |
| H-4 | Deaf | 3-4½ | pub 4½-7<br>pvt 4½-15 | pub 8-11 | | | | pvt | X | X | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | | | |
| H-7 | Emotionally Disturbed | | | 8-11 | 12-14 | 15-21 | | pvt | pvt | X | X | | X | |
| H-8 | Mentally Retarded | | | | | | | | | | | | | |
| H-9 | EMR | 3-7 | 6-8 | 9-11 | 12-14 | 15-21 | | | | NO DATA | | | | |
| H-10 | TMR | 3-7 | 6-8 | 9-11 | 12-14 | 15-21 | | | | X | | | | |
| H-11 | MR (Custodial) | | | | | | 3-21 | X | | | | | | |
| H-12 | Speech Handicaps 2/ | | | | | | 6-21 | | | | | | X | |
| H-13 | Speech and Hearing | | | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | | | | | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | | | |
| H-16 | Physically Handicapped | | 6-12 | | 13-21 | | 6-21 | | | X | | | X | |
| H-17 | Homebound | | | | | | | | | | | | | |
| H-18 | Blind Retarded & Emotionally Disturbed | | | | | | 1-8 | | pvt | NO DATA | | | | |
| H-19 | Aphasic Children | pvt 3-7 | 6-12 | | 13-21 | | | pvt | | pvt | | | | |
| H-27 | Learning Impairment 3/ | | | | | | 6-21 | | pvt | X | | X | X | |

1/ If no entry is shown, category is not applicable to state

2/ Includes Hard of Hearing

3/ Expansion of Special Learning Disabilities, includes perceptually handicapped

State Name: Massachusetts Enrollments In Special Education Data Period 1968 -1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Residential Class | Special Schools | Day Special Class | Cooperative Class | Resource Room | Itinerant | Supplimentary Institution | |
| H-1 | Blind | Preschool | 7 | | | | 1 | | | 9 |
| | | Elementary | 47 | | 20 | | 9 | 4 | 2 | |
| | | Secondary | 88 | | 20 | | 2 | 8 | 10 | |
| H-2 | Partially Sighted | Elementary | | | 62 | 25 | 12 | 73 | 12 | 300 |
| | | Secondary | | | 13 | 15 | 3 | 65 | 12 | |
| H-4 | Deaf | Preschool | | 102 | 161 | | | | | |
| | | Elementary | 150 | 315 | 82 | | | | | |
| H-7 | Emotionally Disturbed | Unspecified | 700 | 600 | 450 | 500 | | 250 | | 1000 |
| H-10 | TMR | Unspecified | | | 1526 | | | | | |
| H-12 | Speech Handicaps | Unspecified | | | | | | 3200 | | |
| H-16 | Physically Handicapped | Unspecified | | | 450 | | | 3000 | | 100 |
| H-18 | Multiple Handicapped | Ungraded | | 7 | | | | | | |
| H-19 | Aphasic | Preschool | | | 7 | | | | | |
| | | Elementary | | | 59 | | | | | |
| | | Unspecified | 23 | | | | | | | |
| H-27 | Learning Impairments | Unspecified | | 70 | 200 | | 150 | 1500 | | |

**State Name:** Massachusetts **Personnel/Pupil Contact Ratio** **Data Period** 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Residential Class | Special Schools | Day Special Class | Cooperative Class | Resource Room | Itinerant | Supplementary Instit. |
| H-1 | Blind | Teacher | Preschool | 1/5 | | | | | | |
| | | | Elementary | 1/10 | | | | 1/9 | 1/5 | |
| | | | Secondary | 1/12 | | | | 1/12 | 1/10 | |
| | | | Ungraded | 1/7 | | | | | | |
| H-2 | Partially Sighted | Teacher | Elementary | | | 1/8 | 1/12 | 1/14 | 1/12 | 1/1 |
| | | | Secondary | | | 1/12 | 1/14 | 1/16 | 1/15 | 1/1 |
| H-4 | Deaf | Teacher | Preschool | | 1/8 | 1/8 | | | | |
| | | | Elementary | 1/10 | 1/10 | 1/8 | | | | |
| | | Aide | Preschool | | | 1/8 | | | | |
| H-5 | Hard of Hearing | Teacher | Ungraded | | | | | | 1/25 | |
| | | Therapist | Ungraded | | | | | | 1/90 | |
| | | | Elementary | | | 1/10 | | | | |
| H-7 | Emotionally Disturbed | Teacher | Elementary | | | 1/8 | 1/30 | | | |
| | | Aide | Elementary | | | 1/8 | | | | |
| H-12 | Speech Handicaps | Therapist | All Grades | | | | | | 1/90 | |
| H-16 | Physically Handicapped | Teacher | Elementary | | | 1/10 | | | | |
| | | | Secondary | | | 1/10 | | | | |
| | | Teacher/Home Bound | Elementary | | | | | | 1/5 | |
| | | | Secondary | | | | | | 1/5 | |
| | | Aide | All Grades | | | 1/10 | | | | |
| H-19 | Aphasic | Teacher | All Grades | | 1/8 | | | | | |
| H-27 | Learning Impairments | Teacher | All Grades | | | | | 1/8 | | |

State Name: Massachusetts Special Education Personnel Estimated Requirements/Employment Comparison 1/ Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind | None | X | | | | 4 | | 1 | | | | | | 5 |
| | BA | X | | | | 9 | | 2 | | | | | | 11 |
| | MA | X | | | | 5 | | 1.5 | | | | | | 6.5 |
| | Total | | 3 | 4/ | 9 2/ | 18 | 18 2/ | 4.5 | 3/ | 4/ | | | 30 2/ | 22.5 |
| T/Partially Sighted | None | X | | | | | | 1 | | | | | | 1 |
| | BA | X | | | | 4 | | 2 | | | | | | 6 |
| | MA | X | | | | 2.5 | | 1 | | | | | | 3.5 |
| | Total | | | | 44 2/ | 6.5 | 8 2/ | 4 | | | | | 52 2/ | 10.5 |
| T/Deaf 1/ | None | X | | | | | | | | 13 | | | | 13 |
| | BA | X | | | | | | | | 64 | | | | 64 |
| | MA | X | | | | | | | | 104 | | | | 104 |
| | Dr | X | | | | | | | | 3 | | | | 3 |
| | Total | | 33 | 4/ | 60 | 4/ | | | 3/ | 184 | | | 93 2/ | 184 |
| Th/Speech 1/ | BA | X | | | | | | | | | | 200 | | 200 |
| | MA | X | | | | | | | | | | 125 | | 125 |
| | Total | | | | 11 | 4/ | | | 3/ | 4/ | 36 | 325 | 47 2/ | 325 |
| A/Deaf 1/ | Total | | 20 | 4/ | | | | | | | | | 20 | 4/ |
| T/Emotionally Disturbed | BA | X | | | | 52 | | | | | | | | 52 |
| | MA | X | | | | 52 | | | | | | | | 52 |
| | Total | | | | 3/ | 104 | 3/ | 4/ | | | | | 3/ | 104 |
| A/Emotionally Disturbed | None | | | | 3/ | 15 | 3/ | 4/ | | | | | 3/ | 15 |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculation incomplete due to missing data
3/ Calculation cannot be made due to missing data
4/ Employment data unavailable

State Name: Massachusetts

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968 - 1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Learning Impairments 1/ | None | X |  |  |  |  |  |  |  |  |  | 150 |  | 150 |
|  | BA | X |  |  |  |  |  |  |  |  |  | 250 |  | 250 |
|  | Total |  |  |  |  |  |  |  |  |  | 19 2/ | 400 | 19 2/ | 400 |
| T/Physically Handicapped | None | X |  |  |  | 90 |  |  |  |  |  | 3 |  | 93 |
|  | BA | X |  |  |  | 193 |  | 126 |  |  |  | 14 |  | 333 |
|  | MA | X |  |  |  | 55 |  | 97 |  |  |  | 12 |  | 164 |
|  | Dr. | X |  |  |  |  |  | 2 |  |  |  | 1 |  | 3 |
|  | Total |  |  |  | 3/ | 338 | 3/ | 225 |  |  | 645 | 35 | 645 | 593 |
| A/Physically Handicapped 1/ | Total |  |  |  |  |  |  |  |  |  | 5 2/ | 4/ | 5 2/ | 4/ |
| T/Aphasic 1/ | Total |  |  |  |  |  |  |  |  |  |  |  | 3/ | 4/ |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculation incomplete due to missing data
3/ Calculation cannot be made due to missing data
4/ Employment data unavailable

State Name: Michigan Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Ungraded | | | | | | | |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | 0-5 | 6-12 | 13-21 | 22-25 | | | | | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 0-5 | 6-12 | 13-21 | 22-25 | | | | | | | |
| H-7 | Emotionally Disturbed | 0-5 | 6-12 | 13-21 | 22-25 | | | | | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 0-5 | 6-12 | 13-21 | 22-25 | | | | | | | |
| H-10 | TMR | 0-5 | 6-12 | 13-21 | 22-25 | | | | | | | |
| H-11 | MR (Institutionalized) | 0-5 | 6-12 | 13-21 | 22-25 | | | | | | | |
| H-12 | Speech Handicaps | 0-5 | 6-12 | 13-21 | 22-25 | | | | | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | | | | | | | | | | |
| H-15 | Brain Injured | 0-5 | 6-12 | 13-21 | 22-25 | | | | | | | |
| H-16 | Physically Handicapped | 0-5 | 6-12 | 13-21 | 22-25 | | | | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

NO DATA TO DEFINE BY HANDICAP CONDITION

1/ If no entry is shown, category is not applicable to the state.

Michigan

State Name: Michigan

Enrollments In Special Education

Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Full Time | Itinerant | | | | |
| H-3 | Visually Handicapped | Preschool | 22 | | | | | NOT AVAILABLE |
| | | Elementary | 388 | | | | | |
| | | Secondary | 212 | | | | | |
| H-6 | Hearing Handicapped | Preschool | 477 | | | | | |
| | | Elementary | 893 | | | | | |
| | | Secondary | 472 | | | | | |
| H-7 | Emotionally Disturbed | Preschool | 31 | | | | | |
| | | Elementary | 1920 | | | | | |
| | | Secondary | 543 | | | | | |
| H-9 | EMR | Preschool | 66 | 46 | | | | |
| | | Elementary | 14354 | 1901 | | | | |
| | | Secondary | 13161 | 2377 | | | | |
| H-10 | TMR | Preschool | 106 | | | | | |
| | | Elementary | 2593 | | | | | |
| | | Secondary | 1513 | | | | | |
| H-12 | Speech Handicaps | Preschool | | 1281 | | | | |
| | | Elementary | | 72877 | | | | |
| | | Secondary | | 11068 | | | | |
| H-15 | Brain Injured | Preschool | 340 | | | | | |
| | | Elementary | 3641 | | | | | |
| | | Secondary | 1383 | | | | | |

State Name: Michigan Personnel/Pupil Contact Ratio Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | All Programs | | | | |
| H-3 | Visually Handicapped | Teacher | All Grades | 1/10 | | | | |
| H-6 | Hearing Handicapped | Teacher | All Grades | 1/8 | | | | |
| H-7 | Emotionally Disturbed | Teacher | All Grades | 1/10 | | | | |
| H-9 | EMR | Teacher | All Grades | 1/15 | | | | |
| H-10 | TMR | Teacher | All Grades | 1/12 | | | | |
| H-12 | Speech Handicaps | Teacher | All Grades | 1/80 | | | | |
| H-16 | Physically Handicapped | Teacher | All Grades | 1/15 | | | | |

State Name: Michigan

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968 -69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | Uk | X | 2 | 3/ | 39 | 3/ | 62 | 3/ | | | 2/ | 82 | 103 | 82 |
| T/Hearing Handicapped | Uk | X | 60 | 3/ | 112 | 3/ | 59 | 3/ | | | 2/ | 218 | 231 | 218 |
| T/Emotionally Disturbed | Uk | X | 3 | 3/ | 192 | 3/ | 54 | 3/ | | | 2/ | 258 | 249 | 258 |
| T/EMR | Uk | X | 8 | 3/ | 1083 | 3/ | 1035 | 3/ | | | 2/ | 1893 | 2127 | 1893 |
| T/TMR | Uk | X | 9 | 3/ | 216 | 3/ | 126 | 3/ | | | 2/ | 314 | 351 | 314 |
| T/Speech Handicaps | Uk | X | 16 | 3/ | 910 | 3/ | 138 | 3/ | | | 2/ | 968 | 1065 | 968 |
| T/Physically Handicapped | Uk | X | | | | | | | | | 2/ | 221 | 2/ | 221 |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations cannot be made due to missing data
3/ Employment data not available
Uk-Unknown

Michigan

State Name: Minnesota Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Primary | Inter-mediate | Secondary | | Residential | Special Schools | | | | |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | 0-4 | 5-9 | 10-12 | 13-21 | | X | | | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 0-4 | 5-9 | 10-12 | 13-21 | | X | | | | | |
| H-7 | Emotionally Disturbed | | | | | | | | | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 0-5 | 6-9 | 10-12 | 13-21 | | | | | | | |
| H-10 | TMR | 0-5 | 6-9 | 10-12 | 13-21 | | | | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | 0-5 | 6-12 | | 13-20 | | | X | | | | |
| H-12 | Speech Handicaps | 0-4 | 5-9 | 10-12 | 13-21 | | | | | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities * | 0-4 | 5-9 | 10-12 | 13-21 | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | | | | | | | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| H-18 | Multiple Handicapped (Crippled) | 0-4 | 5-9 | 10-12 | 13-21 | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state.

* Includes Emotionally Disturbed

Minnesota

State Name: Minnesota

## Enrollments In Special Education

Data Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Special Schools | | | No Program Breakdown | |
| H-3 | Visually Handicapped | Unspecified | 97 | | | | 225 | NOT AVAILABLE |
| H-6 | Hearing Handicapped | Unspecified | 44 | | | | 591 | |
| H-9 | EMR | Unspecified | | | | | 9,832 | |
| H-10 | TMR | Unspecified | | | | | 1,196 | |
| H-11 | MR (Custodial, Severe, Institutional) | Preschool | | 217 | | | | |
| | | Elementary | | 371 | | | | |
| | | Secondary | | 209 | | | | |
| H-12 | Speech Handicaps | Unspecified | | | | | 21,557 | |
| H-14 | Special Learning Disabilities | Unspecified | | | | | 6,902 | |
| H-18 | Multiple Handicapped | Unspecified | | | | | 493 | |

State Name: Minnesota Personnel/Pupil Contact Ratio Data Period 1968 - 1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Special Schools | Day Special Class | Coopera-tive Special Class | Resource Room | Itinerant | Supple-mental |
| H-3 | Visually Handicapped | Teacher | All Grades | | 7/15 | 1/15 | | 1/1 | 1/4 |
| H-6 | Hearing Handicapped | Teacher | All Grades | 1/9 | 1/9 | 1/9 | | | 1/4 |
| H-9 | EMR | Teacher | All Grades | 1/15 | 1/15 | 1/15 | | | 1/4 |
| H-10 | TMR | Teacher | All Grades | 1/15 | 1/15 | 1/15 | | | 1/4 |
| | | | | | | | | | |
| H-12 | Speech Handicaps | Teacher | All Grades | | | 1/60 | 1/60 | 1/60 | 1/4 |
| H-14 | Special Learning Disability | Teacher | All Grades | | 1/8 | | 1/15 | | 1/4 |
| H-18 | Multiple Handicapped | Teacher | All Grades | 1/10 | 1/10 | 1/10 | | | 1/4 |
| | All Handicaps | Aide | All Grades | 1/10 | 1/10 | 1/10 | | | 1/4 |

State Name: Minnesota

### Special Education Personnel Estimated Requirements/Employment Comparison

Data Period 1968 -1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | Uk | x | | | | | | | | | 1/ | 109 | 1/ | 109 |
| T/Hearing Handicapped | Uk | x | | | | | | | | | 1/ | 210 | 1/ | 210 |
| T/EMR | Uk | x | | | | | | | | | 1/ | 851 | 1/ | 851 |
| T/TMR | Uk | x | | | | | | | | | 1/ | 203 | 1/ | 203 |
| T/Mentally Retarded | Uk | x | | | | | | | | | 1/ | 2/ | 1/ | 2/ |
| T/Speech Handicapps | Uk | x | | | | | | | | | 1/ | 480 | 1/ | 480 |
| T/Special Learning Disabilities | Uk | x | | | | | | | | | 1/ | 1063 | 1/ | 1063 |
| T/Multiple Handicapped | Uk | x | | | | | | | | | 1/ | 196 | 1/ | 196 |

1/ Calculations cannot be made due to missing data.

2/ Employment data unavailable.

Uk - Unknown

Minnesota

State Name: Mississippi Overview of Special Education Programs Data Period 1969-70

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Elementary | Secondary | | | | Residential Special Class | Special Schools | Day Special Class | Cooperative Special Class * | Itinerant | Self contained Hearing Program |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 6-14 | | | | | | | | | | |
| H-7 | Emotionally | | | | | | | | | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 6-14 | 14-21 | | | | | | | | | |
| H-10 | TMR | | | | | | | | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | | | | | | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | | | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | | | | | | | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | permissive legislation: 0 to 21 years | | | | | | | | | | | |
| | in practice the range: 6 or 7 to 21 years | | | | | | | | | | | |

NO DATA AVAILABLE

* Vocational Rehabilitation + EMR

1/ If no entry is shown, category is not applicable to the state

Mississippi

State Name: Mississippi Enrollments In Special Education Date Period 1969-70

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
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NO DATA AVAILABLE

* Available only by class per handicap or total of all special education pupils

Mississippi

State Name: Mississippi Personnel/Pupil Contact Ratio Data Period 1969-70

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Coopera-tive Special Class | Self con-tained Hearing Program | | | |
| H-9 | EMR | Teacher | All Grades | 1/20 | | | | |
| H-12 | Speech Handicaps | Speech Pathologists | All Grades | | 1/8 | | | |
| | | Aide/Speech Pathologist | All Grades | | 1/20 | | | |
| | | Speech Therapist | All Grades | | 1/8 | | | |
| | | Aide/Speech Therapist | All Grades | | 1/20 | | | |
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State Name: Mississippi

Special Education Personnel Estimated Requirements/Employment Comparison

Data Period 1969-70

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/EMR | Uk | X |  |  |  |  |  |  |  |  | [1] | 265 | [1] | 265 |
| T/TMR | Uk | X |  |  |  |  |  |  |  |  | [1] | 18 | [1] | 18 |
| Th/Speech | BA | X |  |  |  |  |  |  |  |  |  | 29 |  | 29 |
|  | MA | X |  |  |  |  |  |  |  |  |  | 17 |  | 17 |
|  | Uk | X |  |  |  |  |  |  |  |  |  | 6 |  | 6 |
|  | Total |  |  |  |  |  |  |  |  |  | [1] | 52 | [1] | 52 |

[1] Calculations cannot be made due to missing data

State Name: Missouri Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Unspecified | | | Residential School | Special School | Day Special Class | Itinerant | |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | | 6-12 | 13-18 | | | | X | | X | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 3-5 | 6-12 | 13-18 | | | | X | | X | | |
| H-7 | Emotionally Disturbed | 0-5 | 6-12 | 13-18 | 13-18 | | | X | | X | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 4-5 | 6-12 | | 6-20 | | | | | | | |
| H-10 | TMR | 4-5 | | | 6-20 | | | X | X | X | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | 6-18 | | | | | | X | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | 6-12 | | | | | | | X | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | 6-12 | | 6-18 | | | | | X | X | |
| H-17 | Homebound | | | | | | | | | | | |
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1/ If no entry is shown, category is not applicable to the state.
In Missouri, the Department of Mental Health also operates nine (9) Regional Diagnostic Clinics which serve over 1500 mentally retarded children each year. These were not included because of the high turnover nature of the services provided by clinics.

State Name: Missouri　　Enrollments In Special Education　　Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residen-tial | Special | Day Special Class | Itinerant | | |
| H-3 | Visually Handicapped | Elementary | 118 | | 100 | | | |
| | | Secondary | 80 | | 28 | | | |
| H-6 | Hearing Handicapped | Elementary | 208 | | 447 | | | |
| | | Secondary | 135 | | 109 | | | |
| H-7 | Emotionally Disturbed | Preschool | 60 | | | | | |
| | | Elementary | 450 | | 417 | | | |
| | | Secondary | 420 | | 267 | | | |
| H-9 | EMR | Preschool | 150 | | | | | |
| | | Elementary | | | 12264 | | | |
| | | Secondary | | | 5726 | | | |
| | | Ungraded | 700 | | | | | |
| H-10 | TMR | Preschool | 150 | | | | | |
| | | Elementary | | | 261 | | | |
| | | Secondary | | | 117 | | | |
| | | Ungraded | 500 | 1762 | | | | 20 Spec. schools |
| H-12 | Speech Handicaps | Ungraded | | | | 26862 | | |
| H-14 | Special Learning Disabilities | Elementary | | | 238 | | | |
| H-16 | Physically Handicapped | Elementary | | | 560 | | | |
| | | Secondary | | | 140 | | | |
| | | Ungraded | | | | 1003 homebound | | |

State Name: Missouri    Personnel/Pupil Contact Ratio    Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residen-tial | Special | Day Special | Itinerant | |
| H-3 | Visually Handicapped | Teacher | Elementary | 1/12 | | 1/6-1/12 | | |
| | | | Secondary | 1/12 | | 1/6-1/12 | | |
| | | | Ungraded | 1/12 | | | | |
| H-6 | Hearing Handicapped | Teacher | Elementary | 1/8 | | 1/6-1/14 | | |
| | | | Secondary | 1/8 | | 1/6-1/14 | | |
| | | | Ungraded | 1/8 | | | | |
| H-7 | Emotionally Disturbed | Teacher | Preschool | 1/12 | | | | |
| | | | Elementary | 1/12 | | 1/6-1/10 | | |
| | | | Secondary | 1/12 | | 1/6-1/10 | | |
| | | Counselor | Preschool | 1/50 | | | | |
| | | | Elementary | 1/50 | | | | |
| | | | Secondary | 1/50 | | | | |
| H-9 | EMR | Teacher | Preschool | 1/25 | | | | |
| | | | Elementary | | | 1/15-1/20 | | |
| | | | Secondary | | | 1/15-1/20 | | |
| | | | Ungraded | 1/25 | | | | |
| | | Counselor | Preschool | 1/100 | | | | |
| | | | Ungraded | 1/100 | | | | |
| H-10 | TMR | Teacher | Preschool | 1/25 | | | | |
| | | | Ungraded | 1/25 | 1/10 | 1/10-1/15 | | |
| | | Counselor | Preschool | 1/100 | | | | |
| | | | Ungraded | 1/100 | | | | |

State Name: Missouri Personnel/Pupil Contact Ratio (cont.) Data Period 1968- 1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential | Special | Day Special | Itinerant | |
| H-10 | TMR (cont.) | Teacher | Ungraded | | 1/10 | | | |
| | | Aide | Ungraded | | 1/10 | | | |
| H-12 | Speech Handicaps | Therapist | Ungraded | | | | 1/80-1/125 case load | |
| H-14 | Special Learn. Disability | Teacher | Elementary | | | 1/6-1/10 | | |
| H-16 | Physically Handicapped | Teacher | Elementary | | | 1/10-1/12 | | |
| | | | Secondary | | | 1/10-1/12 | | |
| | | Homebound Teacher | Elementary | | | | 1/1 | |
| | | | Secondary | | | | 1/1 | |
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State Name: Missouri

Special Education Personnel Estimated Requirements/Employment Comparison [1]

Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level<br>Preschool<br>Esti-mated | <br>Preschool<br>Employed | <br>Elementary<br>Esti-mated | <br>Elementary<br>Employed | <br>Secondary<br>Esti-mated | <br>Secondary<br>Employed | <br>Ungraded<br>Esti-mated | <br>Ungraded<br>Employed | <br>Unspecified<br>Esti-mated | <br>Unspecified<br>Employed | <br>Total<br>Esti-mated | <br>Total<br>Employed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T/Visually Handicapped | Uk | X | | | | | | | | | | 14 | | 14 |
| | None | Reg | | | | 1 | | | | | | | | 1 |
| | BA | Reg | | | | 9 | | 10 | | 6 | | | | 25 |
| | MA | Reg | | | | 5 | | 1 | | 2 | | | | 8 |
| | Total | | | | 18-26 | 15 | 9-11 | 11 | [3] | 8 | [3] | 14 | 27-37[2] | 48 |
| T/Hearing Handicapped | Uk | X | | | | | | | | | | 65 | | 65 |
| | None | Reg | | | | 6 | | 6 | | 8 | | | | 20 |
| | BA | Reg | | | | 10 | | 11 | | 4 | | | | 25 |
| | MA | Reg | | | | | | 2 | | 1 | | | [3] | 3 |
| | Total | | | | 59-101 | 16 | 24-35 | 19 | [3] | 13 | [3] | 65 | 83-136[2] | 113 |
| T/Emotionally Disturbed | Uk | X | | | | | | | | | | 75 | | 95 |
| | BA | X | | 3 | | 17 | | 17 | | | | | | 37 |
| | MA | X | | 4 | | 19 | | 17 | | | | | | 40 |
| | Total | | 5 | 7 | 79-107 | 36 | 61-79 | 34 | | | [3] | 75 | 140-186 | 152 |
| O/Counselor for Emotionally Disturbed | MA | X | | 1 | | 6 | | 4 | | | | | | 11 |
| | Total | | 1 | 1 | 9 | 6 | 8 | 4 | | | | | 18 | 11 |
| T/EMR | Uk | X | | | | | | | | | | 1157 | | 1157 |
| | BA | X | | 5 | | | | | | 21 | | | | 26 |
| | MA | X | | 1 | | | | | | 8 | | | | 9 |
| | Total | | 6 | 6 | 613-817 | [4] | 286-381 | [4] | 28 | 29 | [3] | 1157 | 933-1232 | 1192 |
| (cont.) | | | | | | | | | | | | | | |

[1] Based upon enrollment data only (no waiting list data available)
[2] Calculations incomplete due to missing data
[3] Calculations cannot be made due to missing data
[4] Employment data unavailable

Uk - Unknown
Reg - At least regular education certificate - uncertain of special education certification

State Name: Missouri — Special Education Personnel Estimated Requirements/Employment Comparison 1/ — Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level: Preschool Esti-mated | Preschool Employed | Elementary Esti-mated | Elementary Employed | Secondary Esti-mated | Secondary Employed | Ungraded Esti-mated | Ungraded Employed | Unspecified Esti-mated | Unspecified Employed | Total Esti-mated | Total Employed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T/TMR | Uk | X | | | | | | | | | | 26 | | 26 |
| | None | X | | | | | | | | 41 | | | | 41 |
| | BA | X | | 5 | | | | | | 71 | | | | 76 |
| | MA | X | | 1 | | | | | | 7 | | | | 8 |
| | Total | | 6 | 6 | | | | | 196 2/ | 119 | | 26 | 202 2/ | 151 |
| O/Couselor for TMR | MA | X | | 1 | | | | | | 2 | | | | 3 |
| | Total | | 1 | 1 | | | | | 5 | 2 | | | 6 | 3 |
| T/Charge, TMR | None | X | | | | | | | | 31 | | | | 31 |
| | BA | X | | | | | | | | 20 | | | | 20 |
| | MA | X | | | | | | | | 6 | | | | 6 |
| | Total | | | | | | | | 176 | 57 | | | 176 | 57 |
| A/TMR | None | | | | | | | | | 72 | | | | 72 |
| | Total | | | | | | | | 176 | 72 | | | 176 | 72 |
| Th/Speech | Uk | X | | | | | | | 214-335 | 284 | | | 214-335 | 284 |
| T/Special Learning Disabilities | Uk | X | | | 23-39 | 24 | | | | | | | 23-39 | 24 |
| O/Counselor for EMR | MA | X | | 1 | | | | | | 2 | | | | 3 |
| | Total | | 3 | 1 | | | | | 7 | 2 | | | 10 | 3 |
| T/Physically Handicapped | Uk | X | | | 46-56 | 4/ | 11-14 | 4/ | 1003 | 1166 | | | 1060-1073 | 1166 |

1/ Based upon enrollment data only (no waiting list available)
2/ Calculations incomplete due to missing data
4/ Employment data unavailable

State Name: Missouri

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968 -1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| Other personnel for which contact ratios are not known -- | | | | | | | | | | | | | | |
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| Th/Physical | MA | Reg | | | | | | | | 1 | | | 3/ | 1 |
| Th/Occupational | BA | Reg | | | | | | | | 1 | | | 3/ | 1 |
| Th/Speech | BA | Reg | | | | | | | | 1 | | | 3/ | 1 |
| T/Concepts | MA | Reg | | | | | | | | 1 | | | 3/ | 1 |
| T/Mobility | BA | Reg | | | | | | | | 1 | | | 3/ | 1 |
| | MA | Reg | | | | | | | | 2 | | | 3/ | 2 |
| O/Counselor | MA | Reg | | | | | | | | 1 | | | 3/ | 1 |
| O/Social Worker | MA | Reg | | | | | | | | 1 | | | 3/ | 1 |
| O/Psychologist (PT) | Dr | Reg | | | | | | | | 1 | | | 3/ | 1 |
| O/Audiologist | MA | | | | | | | | | 1 | | | 3/ | 1 |
| Th/Speech | Uk | | | | | | | | | 1 | | | 3/ | 1 |
| | | | | | | | | | | | | | | |
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1/ Based upon enrollment data only (no waiting list data available)

3/ Calculations cannot be made due to missing data

Uk - Unknown

State Name: Montana Overview of Special Education Programs Data Period1969 - 1970

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | | | Residential Special Class | Special Class in Regular Sch. | Cooperative Special Class | Itinerant | | |
| H-1 | Blind | 3-6 | 7-14 | 14-19 | | | X | | | X | | |
| H-2 | Partially Sighted | | 7-13 | | | | | | X | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 3-6 | 6-14 | 14-19 | | | X | | | X | | |
| H-5 | Hard of Hearing | 6-8 | 10-13 | | | | | X | X | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally Disturbed | | 5-12 | | | | | X | | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 6-16 | 16-19 | | | | X | | | | |
| H-10 | TMR | 5-7 | 6-20 | | | | | X | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | 6-14 | 14-18 | | | | | | X | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | | | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | 7-14 | | | | | X | | | | |
| H-17 | Homebound | | | | | | | | | | | |
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1/ If no entry is shown, category is not applicable to the state.

State Name: Montana

Enrollments In Special Education

Data Period 1969-1970

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type |  |  |  |  | Waiting List |
|---|---|---|---|---|---|---|---|---|
|  |  |  | Residential Special Class | Special Class in Regular Schools | Cooperative Special Class | Itinerant |  |  |
| H-1 | Blind | Preschool |  |  |  |  |  | NOT AVAILABLE |
|  |  | Elementary | 29 |  |  |  |  |  |
| H-2 | Partially Sighted | Elementary |  |  | 25 |  |  |  |
| H-4 | Deaf | Preschool |  |  |  | 15 |  |  |
|  |  | Elementary | 76 |  |  |  |  |  |
|  |  | Secondary | 18 |  |  |  |  |  |
| H-5 | Hard of Hearing | Preschool |  | 7 |  |  |  |  |
|  |  | Elementary |  | 7 | 7 |  |  |  |
| H-7 | Emotionally Disturbed | Elementary |  | 20 |  |  |  |  |
| H-9 | EMR | Elementary |  | 1023 |  |  |  |  |
|  |  | Secondary |  | 165 |  |  |  |  |
| H-10 | TMR | Preschool |  | 12 |  |  |  |  |
|  |  | Elementary |  | 787 |  |  |  |  |
| H-12 | Speech Handicaps | Ungraded |  |  |  | 803 |  |  |
| H-16 | Physically Handicapped | Elementary |  | 47 |  |  |  |  |

Montana

State Name: Montana Personnel/Pupil Contact Ratio Data Period 1969 -1970

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | All Programs | | | | |
| | All Handicaps * | Teacher | All Grades | 1/12 | | | | |

* Only one personnel/pupil ratio for teachers in all handicaps and education levels. Therapist ratio is flexible and not defined.

State Name: Montana Special Education Personnel Estimated Requirements/Employment Comparison 1/ Data Period 1969- 1970

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind | BA | X |  | 1 |  | 5 |  |  |  |  |  |  |  | 6 |
|  | MA | X |  |  |  | 1 |  |  |  |  |  |  |  | 1 |
|  | Total |  | 2 | 1 | 5 | 6 | 2/ |  |  |  |  |  | 7 3/ | 7 |
| T/Deaf | BA |  |  | 1 |  | 18 |  |  |  |  |  |  |  | 19 |
|  | MA |  |  |  |  | 2 |  |  |  |  |  |  |  | 2 |
|  | Total |  | 1 | 1 | 6 | 20 | 2 | 4/ |  |  |  |  | 9 | 21 |
| T/Hard of Hearing | BA |  |  | 1 |  | 2 |  |  |  |  |  |  |  | 3 |
|  | Total |  | 1 | 1 | 1 | 2 | 2/ |  |  |  |  |  | 2 3/ | 3 |
| T/Emotionally Disturbed | BA |  |  |  |  | 1 |  |  |  |  |  |  |  | 1 |
|  | MA |  |  |  |  | 1 |  |  |  |  |  |  |  | 1 |
|  | Total |  | 2/ |  | 2 | 2 |  |  |  |  |  |  | 2 3/ | 2 |
| T/EMR | Uk |  | 2/ |  | 85 | 109 | 14 | 15 |  |  |  |  | 100 3/ | 124 |
| T/TMR | BA |  |  |  |  | 5 |  |  |  |  |  |  |  | 5 |
|  | MA |  |  |  |  | 1 |  |  |  |  |  |  |  | 1 |
|  | Uk |  |  |  |  | 10 |  |  |  |  |  |  |  | 10 |
|  | Total |  | 1 | 4/ | 24 | 15 | 2/ |  |  |  |  |  | 25 3/ | 15 |
| Th/Speech Handicap | Uk |  | 2/ |  | 4 | 18 | 2/ |  |  |  |  |  | 4 3/ | 18 |

1/ Based upon enrollment data only (no waiting list data available)

2/ Calculations cannot be made due to missing data

3/ Calculations incomplete due to missing data

4/ Employment data unavailable

Uk-Unknown

State Name: Nebraska    Overview of Special Education Programs    Data Period 67-68<br>68-69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Ungraded | | Residential School | Special School | Day Special Class | Resource Room | Itinerant | |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | 0-5 | 5-13 | 14-17 | | | X | X | X | X | X | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 0-5 | 5-13 | 14-17 | | | X | X | X | | X | |
| H-7 | Emotionally (Disturbed/Handicapped) | 0-5 | 5-13 | 14-17 | | | X | X | X | X | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 5-13 | 14-17 | | | X | X | X | X | | |
| H-10 | TMR | | | | 5-21 | | X | X | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | 0-5 | 5-13 | 14-17 | 5-21 | | X | X | | X | X | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | 5-13 | 14-17 | | | | | X | | | |
| H-15 | Brain Injured | | | | | | X | X | | X | X | |
| H-16 | Physically Handicapped | | 5-13 | 14-17 | | | | | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state

State Name: Nebraska	Enrollments In Special Education	Date Period 67-68 68-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type |  |  |  |  | Waiting List |
|---|---|---|---|---|---|---|---|---|
|  |  |  | Resi-dential School | Special School | Day Special Class | Resource Room | All Public School Programs |  |
| H-3 | Visually Handicapped |  |  |  |  |  | 121 | NOT AVAILABLE |
| H-6 | Hearing Handicapped |  |  |  |  |  | 85 |  |
| H-7 | Emotionally Disturbed | Elementary | 70 |  |  |  | 58 |  |
|  |  | Secondary | 40 |  |  |  |  |  |
| H-9 | EMR | Elementary | 95 |  |  |  | 4645 |  |
| H-10 | TMR | Elementary | 320 |  |  |  | 448 |  |
| H-12 | Speech Handicaps |  |  |  |  |  | 9596 |  |
| H-14 | Special Learning Disabilities |  |  |  |  |  |  |  |
| H-16 | Physically Handicapped | Elementary | 60 |  |  |  | 142+ |  |
|  |  | Secondary | 46 |  |  |  | 373 |  |

Nebraska

67-68
State Name: Nebraska Personnel/Pupil Contact Ratio Data Period 68-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Resi-dential School | Special School | Day Special | Resource | Itinerant |
| H-3 | Visually Handicapped | Teacher | Preschool | | 1/8 min | | | |
| | | | Elementary | ? | | | | |
| | | | Secondary | ? | | | | |
| | | | Ungraded | | | | 1/8 min | |
| | | Aide | Preschool | | none | | | |
| H-6 | Hearing Handicapped | Teacher | Preschool | | 1/8-12 | | | |
| | | | Elementary | 1/8-12 | 1/8-12 | | | |
| | | | Secondary | 1/8-12 | | | | |
| | | Therapist | Ungraded | | 1/8-30* | | 1/8-30* | 1/8-30* |
| H-7 | Emotionally Disturbed | Teacher | Elementary | 1/5-10 | 1/4-12 | 1/4-12 | 1/4-12 | |
| | | | Secondary | 1/5-10 | | | | |
| H-9 | EMR | Teacher | Elementary | 1/8-20 | 1/8-20 | 1/8-20 | 1/8-20 | |
| | | | Secondary | 1/8-30 | 1/8-30 | | 1/8-30 | |
| H-8 | Mentally Retarded | Teacher | Preschool | 1/30 | | | | |
| | | Aide | Preschool | 1/30 | | | | |
| | | Teacher | Elementary | 1/30 | | | | |
| | | Aide | Elementary | 1/30 | | | | |
| H-10 | TMR | Teacher | Ungraded | 1/5-10 | 1/5-10 | | | |
| | | Aide | Ungraded | 1/5-10 | 1/5-10 | | | |
| H-12 | Speech Handicaps | Speech Therapist | Preschool | | | | | 1/75* |
| | | Therapist | Elementary | | | | 1/75* | 1/75* |

* Case load

State Name: Nebraska

Personnel/Pupil Contact Ratio

Data Period 67-68
68-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Resi-dential School | Special School | Day School | Resource | Itinerant |
| H-12 | Speech Handicaps (cont.) | Therapist | Secondary | ? | ? | | 1/75* | 1/75* |
| | | | Ungraded | ? | ? | | 1/75* | 1/75* |
| H-14 | Special Learning Disa-abilities | Teacher | Elementary | | | 1/8-20 | | |
| | | Diagnostician | Elementary | | | | | |
| H-16 | Physically Handicapped | Teacher | Elementary | 1/10 | 1/8 | | 1/8 | |
| | | Teacher/Homebound | Elementary | | | | | 1/8 |
| | | Teacher | Secondary | 1/10 | | | | |
| | | Teacher/Homebound | Secondary | | | | | 1/8 |

State Name: Nebraska

Special Education Personnel Estimated Requirements/Employment Comparison1/

Data Period 67-68 68-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | BA | X | | 1.5 | | | | | | 1 | | | | 2.5 |
| | MA | | | 1 | | | | | | | | | | 1 |
| | Total | | 3/ | 2.5 | | | | | 3/ | 1 | | | 3/ | 3.5 |
| A/Visually Handicapped | None | | | | | | | | | 2 | | | 3/ | 2 |
| Th/Hearing Handicapped | BA | X | | | | | | | | 2 | | | | 2 |
| | MA | X | | | | | | | | 4 | | | | 4 |
| | Total | | | | | | | | 3/ | 6 | | | 3/ | 6 |
| T/Emotionally Disturbed | BA | X | | 1 | | 11 | | 3 | | | | | | 15 |
| | MA | X | | | | 3 | | 1 | | | | | | 4 |
| | Total | | 3/ | 1 | 7-142/ | 14 | 4-8 | 4 | | | | | 11-222/ | 19 |
| A/Emotionally Distrubed | None | | | | 3/ | 4 | | | | | | | 3/ | 4 |
| T/EMR | BA | X | | 3 | | | | | | | | | | 3 |
| | Total | | 3/ | 3 | 5-122/ | 4/ | | | | | | | 5-122/ | 3 |
| A/EMR | None | | 3/ | 2 | | | | | | | | | 3/ | 2 |
| T/Mentally Retarded | BA | X | | | | 3 | | | | 3 | | | | 6 |
| | MA | X | | | | 1 | | | | | | | | 1 |
| | Total | | | | 3/ | 4 | | | 3/ | 3 | | | 3/ | 7 |
| A/Mentally Retarded | None | | | | 3/ | 6 | | | | | | | 3/ | 6 |
| T/Physically Handicapped | BA | X | | | | 2.5 | | 1.5 | | | | | | 4 |
| | Total | | | | 62/ | 2.5 | 52/ | 1.5 | | | | | 112/ | 4 |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations incomplete due to missing data
3/ Calculation cannot be made due to missing data
4/ Employment data unavailable

State Name: Nebraska     Special Education Personnel Estimated Requirements/Employment Comparison 1/     Data Period 67-68 68-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| O/Mentally Retarded Psychologist | MA | X | | | | | | | 3/ | 1 | | | 3/ | 1 |
| Th/Mentally Retarded Speech | MA | X | | | | | | | 3/ | 1 | | | 3/ | 1 |
| Th/Speech of Emotionally Disturbed | MA | X | | | | | | | 3/ | 1 | | - | 3/ | 1 |
| Th/Speech of Homebound | MA | X | | | | | | | 3/ | 1 | | | 3/ | 1 |
| T/TMR | Total | | | | | | | | 32-64 2/ | | | | 32-64 2/ | 4/ |
| A/TMR | Total | | | | | | | | 32-64 2/ | | | | 32-64 2/ | 4/ |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations incomplete due to missing data
3/ Calculation cannot be made due to missing data
4/ Employment data available

Nebraska

State Name: Nevada

## Overview of Special Education Programs

Data Period 1968 - 1969

| Handicap Code | Handicap Category[1] | Education Level (Age Ranges) |  |  |  |  | Education Program |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Unspecified |  |  |  |  | Residential | Special | Day Special | Resource Room |  |  |
| H-1 | Blind |  |  |  |  |  |  |  |  |  |  |  |
| H-2 | Partially Sighted |  |  |  |  |  |  |  |  |  |  |  |
| H-3 | Visually Handicapped |  |  |  |  |  |  |  |  |  |  |  |
| H-4 | Deaf | 3-21 |  |  |  |  |  |  | X |  |  |  |
| H-5 | Hard of Hearing | 3-21 |  |  |  |  |  |  | X |  |  |  |
| H-6 | Hearing Handicapped |  |  |  |  |  |  |  |  |  |  |  |
| H-7 | Emotionally Disturbed | 3-21 |  |  |  |  | X | X | X |  |  |  |
| H-8 | Mentally Retarded |  |  |  |  |  |  |  |  |  |  |  |
| H-9 | EMR | 3-21 |  |  |  |  |  |  | X |  |  |  |
| H-10 | TMR |  |  |  |  |  |  |  |  |  |  |  |
| H-11 | MR (Custodial, Severe, Institutional) |  |  |  |  |  |  |  |  |  |  |  |
| H-12 | Speech Handicaps |  |  |  |  |  |  |  |  |  |  |  |
| H-13 | Speech and Hearing |  |  |  |  |  |  |  |  |  |  |  |
| H-14 | Special Learning Disabilities |  |  |  |  |  |  |  |  |  |  |  |
| H-15 | Brain Injured |  |  |  |  |  |  |  |  |  |  |  |
| H-16 | Physically Handicapped | 3-21 |  |  |  |  |  |  | X |  |  |  |
| H-17 | Homebound | 3-21 |  |  |  |  |  |  |  | X |  |  |
| H-18 | Multiple Handicapped | 3-21 |  |  |  |  |  |  | X |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

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[1] If no entry is shown, category is not applicable to the state

State Name: Nevada Enrollments In Special Education Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Special | Day Special | Resource Room | | |
| H-6 | Hearing Handicapped | Unspecified | | | 44 | | | NOT AVAILABLE |
| H-7 | Emotionally Disturbed | Unspecified | 24 | 6 | 482 | | | |
| H-8 | Mentally Retarded 1/ | Unspecified | | | 1459 | | | |
| H-11 | MR (Institutionalized) | Unspecified | 90 | 45 | | | | |
| H-16 | Physically Handicapped | Unspecified | | | 137 | | | |
| H-17 | Home Bound | Unspecified | | | | 78 | | |

1/ Includes TMR and EMR

State Name: Nevada Personnel/Pupil Contact Ratio Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Day Special | | | | |
| H-1 | Blind | Teacher | Preschool | 1/5 | | | | |
| | | | Primary | 1/5 | | | | |
| | | | Elementary | 1/6 | | | | |
| | | | Intermediate | 1/8 | | | | |
| | | | Secondary | 1/8 | | | | |
| | | Aide (with teacher) | Preschool | 1/9 | | | | |
| | | | Primary | 1/9 | | | | |
| | | | Elementary | 1/10 | | | | |
| | | | Intermediate | 1/12 | | | | |
| | | | Secondary | 1/12 | | | | |
| H-2 | Partially Sighted | Teacher | Preschool | 1/6 | | | | |
| | | | Primary | 1/6 | | | | |
| | | | Elementary | 1/8 | | | | |
| | | | Intermediate | 1/8 | | | | |
| | | | Secondary | 1/10 | | | | |
| | | Aide (with teacher) | Preschool | 1/10 | | | | |
| | | | Elementary | 1/12 | | | | |
| | | | Secondary | 1/14 | | | | |
| H-4 | Deaf | Teacher | Preschool | 1/5 | | | | |
| | | | Elementary | 1/6 | | | | |
| | | | Intermediate | 1/8 | | | | |
| | | | Secondary | 1/8 | | | | |
| | | | | | | | | |

State Name: Nevada

Personnel/Pupil Contact Ratio

Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Day Special | | | | |
| H-5 | Hard of Hearing | Teacher | Preschool | 1/5 | | | | |
| | | | Primary | 1/5 | | | | |
| | | | Elementary | 1/6 | | | | |
| | | | Intermediate | 1/8 | | | | |
| | | | Secondary | 1/8 | | | | |
| H-7 | Emotionally Disturbed | Teacher | Preschool | 1/6 | | | | |
| | | | Primary | 1/6 | | | | |
| | | | Elementary | 1/8 | | | | |
| | | | Intermediate | 1/10 | | | | |
| | | | Secondary | 1/10 | | | | |
| H-9 | EMR | Teacher | Preschool | 1/8 | | | | |
| | | | Primary | 1/10 | | | | |
| | | | Elementary | 1/12 | | | | |
| | | | Intermediate | 1/14 | | | | |
| | | | Secondary | 1/14 | | | | |
| | | Aide (with teacher) | Preschool | 1/12 | | | | |
| | | | Primary | 1/14 | | | | |
| | | | Elementary | 1/16 | | | | |
| | | | Intermediate | 1/18 | | | | |
| | | | Secondary | 1/18 | | | | |
| H-10 | TMR | Teacher | Preschool | 1/6 | | | | |
| | | | Primary | 1/8 | | | | |

State Name: Nevada Personnel/Pupil Contact Ratio Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Day Special | | | | |
| H-10 | TMR (cont.) | Teacher | Elementary | 1/8 | | | | |
| | | | Intermediate | 1/10 | | | | |
| | | Aide (with teacher) | Preschool | 1/10 | | | | |
| | | | Primary | 1/12 | | | | |
| | | | Elementary | 1/12 | | | | |
| | | | Intermediate | 1/14 | | | | |
| H-12 | Speech Handicaps | Therapist | All Grades | 1/70 | | | | |
| H-16 | Physically Handicapped | Teacher | Preschool | 1/6 | | | | |
| | | | Primary | 1/6 | | | | |
| | | | Elementary | 1/8 | | | | |
| | | | Intermediate | 1/10 | | | | |
| | | | Secondary | 1/12 | | | | |
| | | Aide (with teacher) | Preschool | 1/10 | | | | |
| | | | Primary | 1/10 | | | | |
| | | | Elementary | 1/12 | | | | |
| | | | Intermediate | 1/14 | | | | |
| | | | Secondary | 1/16 | | | | |
| H-17 | Homebound | Teacher | All Grades | 1/10 | | | | |
| H-18 | Multiple Handicapped | Teacher | Preschool | 1/5 | | | | |
| | | | Primary | 1/5 | | | | |
| | | | Elementary | 1/8 | | | | |
| | | | Intermediate | 1/10 | | | | |

State Name: Nevada    Personnel/Pupil Contact Ratio    Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Day Special | | | | |
| H-18 | Multiple Handicapped (cont.) | Teacher | Secondary | 1/10 | | | | |
| | | Aide (with teacher) | Preschool | 1/9 | | | | |
| | | | Primary | 1/9 | | | | |
| | | | Elementary | 1/12 | | | | |
| | | | Intermediate | 1/14 | | | | |
| | | | Secondary | 1/14 | | | | |
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State Name: Nevada

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-1969

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | Uk | X | | | | | | | | | | 4 | | 4 |
| T/Hearing Handicapped | Uk | X | | | | | | | | | | 16 | | 16 |
| T/Emotionally Disturbed | Uk | X | | | | | | | | | | 1 | | 1 |
| T/EMR | Uk | X | | | | | | | | | | 97 | | 97 |
| T/TMR | Uk | X | | | | | | | | | | 20 | | 20 |
| T/Mentally Retarded | Uk | X | | | | | | | | | | 24 | | 24 |
| T/Neurological Handicapped | Uk | X | | | | | | | | | | 1 | | 1 |
| T/Physically Handicapped | Uk | X | | | | | | | | | | 7 | | 7 |
| T/Multiple Handicapped | Uk | X | | | | | | | | | | 9 | | 9 |
| T/Socially Maladjusted | Uk | X | | | | | | | | | | 17 | | 17 |

1/ Calculations cannot be made due to missing data
Uk-Unknown

State Name: **New Hampshire** Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Ungraded | | Residential School | Special School | Day Special Class | Resource Room | Itinerant | |
| H-1 | Blind | 3-5 | 5-12 | 13-18 | | | | | | | X | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 4-5 | 6-12 | 13-20 | | | X | X | X | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally (Disturbed/Handicapped) | | 5-12 | 13-18 | 5-20 | | X | | X | X | X | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 5-12 | 13-18 | | | X | X | X | | | |
| H-10 | TMR | | 5-12 | 13-18 | 5-20 | | X | X | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | | | | | | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | 5-12 | 13-18 | | | | X | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | 5-12 | 13-18 | | | | X | | | X | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state.

State Name: New Hampshire

Enrollments In Special Education

Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting * List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential School | Special School | Day Special Class | Resource Room | Itinerant | |
| H-1 | Blind | Ungraded | | | | | 96 | |
| H-4 | Deaf: | Preschool | | | 8 | | | |
| | | Elementary | 93 | | | | | |
| | | Secondary | 13 | | | | | |
| | | Ungraded | | 11 | | | | 35 all grades |
| H-7 | Emotionally Disturbed | Ungraded | 123 | | 11 | 7 | 99 | 1047 all grades |
| H-9 | EMR | Elementary | 76 | | | | | |
| | | Ungraded | | 242 | 1134 | | | 16 all grades |
| H-10 | TMR | Ungraded | | 40 | | | | |
| H-16 | Physically Handicapped | Ungraded | | 15 | | | 90 | 108 all grades |

*Waiting List data incomplete

State Name: New Hampshire Personnel/Pupil Contact Ratio Data Period 1968 - 1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential School | Special School | Day Special Class | Resource Room | Itinerant |
| H-1 | Blind | Teacher | Elementary | | | 1/15 | | |
| H-4 | Deaf | Teacher | Preschool | | 1/8 | | | |
| | | | Elementary | | 1/8 | | | |
| H-7 | Emotionally Disturbed | Teacher | Elementary | 1/10 | | 1/10 | 1/10 | 1/10 |
| | | | Secondary | 1/10 | | | | |
| | | Teacher/State | Ungraded | 1/5 | | | | |
| | | Aide/State | Ungraded | ? | | | | |
| H-9 | EMR | Teacher | Elementary | | 1/15 | 1/15 | | |
| | | | Secondary | | | 1/15 | | |
| | | Teacher/State | Elementary | 1/8-15 | | | | |
| | | Aide/State | Elementary | 1/10-19* | | | | |
| H-10 | TMR | Teacher | Elementary | | 1/10 | 1/10 | | |
| | | Teacher/State | Ungraded | 1/4-8 | | | | |
| H-14 | Special Learning Disabilities | Teacher | Elementary | | 1/15 | | | |
| | | Teacher | Ungraded | 1/15 | | | | |
| H-16 | Physically Handicapped | Teacher | Elementary | | 1/15 | | | |
| | | | Ungraded | 1/15 | | | | |
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*Add 2-4 children to class

State Name: New Hampshire

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind 1/ | Uk | X |  |  | 2/ | 1 |  |  |  |  |  |  | 2/ | 1 |
| T/Deaf | Uk | X | 2/ | 1 | 2/ | 16 |  |  | 6 | 4/ |  |  | 6 3/ | 17 |
| T/Emotionally Disturbed | Uk | X |  |  | 2/ | 11 | 2/ | 3 | 2/ | 7 | 199 3/ | 4/ | 199 2/ | 21 4/ |
| A/Emotionally Disturbed | Uk |  |  |  |  |  |  |  | 2/ | 2 |  |  | 2/ | 2 |
| T/EMR | Uk | X |  |  |  | 101 |  | 12 |  |  |  |  | 2/ | 113 |
|  | BA |  |  |  |  | 4 |  |  |  |  |  |  |  | 4 |
|  | Total |  |  |  | 2/ | 105 | 2/ | 12 | 75 2/ | 4/ |  |  | 75 3/ | 117 |
| A/EMR | None |  |  |  | 4-7 | 2 |  |  |  |  |  |  | 4-7 | 2 |
| T/TMR | Uk | X |  |  |  | 26 |  | 12 |  |  |  |  |  | 38 |
|  | BA |  |  |  |  |  |  |  |  | 1 |  |  | 2/ | 1 |
|  | None |  |  |  |  |  |  |  |  | 3 |  |  | 2/ | 3 |
|  | Total |  |  |  | 2/ | 26 | 2/ | 12 | 7-14 3/ | 4 |  |  | 7-14 3/ | 42 |
| T/Special Learning Disabilities 1/ | Uk | X |  |  | 2/ | 3 |  |  | 2/ | 4 |  |  | 2/ | 7 |
| T/Physically Handicapped | Uk | X |  |  | 2/ | 1 |  |  | 2/ | 3 |  |  | 2/ | 4 |

1/ Based upon enrollment data only (no waiting list data available).
2/ Calculations cannot be made due to missing data.
3/ Calculations incomplete due to missing data (estimated requirements are not calculated by degree level).
4/ Employment data unavailable.

Uk - Unknown

**State Name:** New Jersey  Overview of Special Education Programs  Data Period 1968 -69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ungraded | | | | | Residential Special Class | Special School | Day Special Class | Coopera- tive Special | Individual Instruction | Resource Room |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | 5-20 | | | | | | | | | | |
| H-4 | Deaf 2/ | 5-20 | | | | | | | | | | |
| H-5 | Hard of Hearing 2/ | 5-20 | | | | | | | | | | |
| H-6 | Auditory Handicapped 3/ | 5-20 | | | | | | | | | | |
| H-7 | Emotionally | 5-20 | | | | | | | | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 5-20 | | | | | | | | | | |
| H-10 | TMR | 5-20 | | | | | | | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Communication Handicaps | 5-20 | | | | | | | | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Potentially Severe Learning Disability | 5-20 | | | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Orthopedically Handicapped | 5-20 | | | | | | | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| H-18 | Multiple Handicapped | 5-20 | | | | | | | | | | |
| H-20 | Chronically Ill | 5-20 | | | | | | | | | | |
| H-23 | Socially Maladjusted | 5-20 | | | | | | | | | | |

Data not available

1/ If no entry is shown, category is not applicable to the state
2/ Broken out in data
3/ Recognized in policy

State Name: New Jersey Overview of Special Education Programs Data Period 1968-69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ungraded | | | | | Residential Special Class | Special School | Day Special Class | Cooperative Special | Individual Instruction | Resource Room |
| H-27 | Perceptually Handicapped | | | | | | | | | | | |
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Data not available

1/ If no entry is shown, category is not applicable to the state

New Jersey

State Name: New Jersey Enrollments In Special Education* Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Day Special Class | Cooperative Special | Individual Instruction | Resource Room | |
| H-4 | Deaf | Preschool | 21 | 21 | 50 | 1 | | |
| | | Elementary | 231 | 24 | 139 | 3 | 6 | |
| | | Secondary | 92 | 17 | 41 | | 5 | |
| | | Ungraded | 147 | 3 | 4 | | | |
| H-5 | Hard of Hearing | Preschool | | | 13 | 3 | | |
| | | Elementary | | | 139 | 22 | 20 | |
| | | Secondary | | | 15 | 14 | 1 | |
| | | Ungraded | | | | 9 | 1 | Not available |

* Only the number of classes or units are available at state level except for the above

New Jersey

State Name: New Jersey Personnel/Pupil Contact Ratio Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | All Programs | | | | |
| H-3 | Visually Handicapped | Teacher | Unspecified | 1/8 | | | | |
| H-6 | Hearing Handicapped | Teacher | Unspecified | 1/8 | | | | |
| H-7 | Emotionally Disturbed | Teacher | Unspecified | 1/8 | | | | |
| H-9 | EMR | Teacher | Unspecified | 1/15 | | | | |
| H-10 | TMR | Teacher | Unspecified | 1/10 | | | | |
| H-12 | Speech Handicaps | Teacher | Unspecified | 1/12 | | | | |
| H-16 | Physically Handicapped | Teacher | Unspecified | 1/15 | | | | |
| H-18 | Multiple Handicapped | Teacher | Unspecified | 1/8 | | | | |
| H-20 | Chronically Ill | Teacher | Unspecified | 1/15 | | | | |
| H-23 | Socially Maladjusted | Teacher | Unspecified | 1/12 | | | | |
| H-27 | Perceptually Handicapped | Teacher | Unspecified | 1/8 | | | | |

New Jersey

State Name: New Jersey

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | None | | | | | | | | | | | 2 | | 2 |
| | BA | X | | | | | | | | | | 8 | | 8 |
| | MA | X | | | | | | | | | | 9 | | 9 |
| | Total | | | | | | | | | | | 19 | | 19 |
| T/Hearing Handicapped | None | | | | | | | | | | | 5 | | 5 |
| | BA | | | | | | | | | | | 44 | | 44 |
| | MA | | | | | | | | | | | 15 | | 15 |
| | Total | | 14 | | 73 | | 22 | | 21 | | | 64 | 130 | 64 |
| T/EMR | None | | | | | | | | | | | 167 | | 167 |
| | BA | X | | | | | | | | | | 1074 | | 1074 |
| | MA | X | | | | | | | | | | 313 | | 313 |
| | DR | X | | | | | | | | | | 4 | | 4 |
| | Uncer | | | | | | | | | | | 3 | | 3 |
| | Total | | | | | | | | | | | 1561 | | 1561 |
| T/Speech Handicaps | None | | | | | | | | | | | 4 | | 4 |
| | BA | X | | | | | | | | | | 305 | | 305 |
| | MA | X | | | | | | | | | | 111 | | 111 |
| | Total | | | | | | | | | | | 420 | | 420 |
| T/Physically Handicapped | None | | | | | | | | | | | 16 | | 16 |
| | BA | X | | | | | | | | | | 125 | | 125 |
| | MA | X | | | | | | | | | | 53 | | 53 |

1/ Calculations cannot be made due to missing data

State Name: New Jersey

Special Education Personnel Estimated Requirements/Employment Comparison [1]

Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Physically Handicapped (cont) | Total |  |  |  |  |  |  |  |  |  |  | 194 |  | 194 |
| T/Socially—Emot. Maladjusted | None |  |  |  |  |  |  |  |  |  |  | 13 |  | 13 |
|  | BA | X |  |  |  |  |  |  |  |  |  | 132 |  | 132 |
|  | MA | X |  |  |  |  |  |  |  |  |  | 47 |  | 47 |
|  | Total |  |  |  |  |  |  |  |  |  |  | 192 |  | 192 |
| T/Other Teachers | None |  |  |  |  |  |  |  |  |  |  | 14 |  | 14 |
|  | BA |  |  |  |  |  |  |  |  |  |  | 190 |  | 190 |
|  | MA |  |  |  |  |  |  |  |  |  |  | 73 |  | 73 |
|  | Total |  |  |  |  |  |  |  |  |  |  | 277 |  | 277 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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[1] Calculations cannot be made due to missing data

State Name: New Mexico Overview of Special Education Programs Data Period 1969- 1970

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | All Grades | | Residential School | Day Special Class | Cooperative Class | Itinerant | | |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | 3-5 | 6-12 | 13-21 | | | X | X | | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 3-5 | 6-12 | 13-21 | | | X | X | | | | |
| H-7 | Emotionally Disturbed | | 6-12 | 13-21 | | | X | X | X | | | |
| H-8 | Mentally Retarded (combined classes) | | 6-12 | 13-21 | | | | X | | | | |
| H-9 | EMR | | 6-12 | 13-21 | | | X | X | X | | | |
| H-10 | TMR | 2-4 | 5-13 | 14-21 | | | X | X | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | 6-21 | | | | | X | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | 6-12 | 13-21 | | | | X | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | 6-12 | 13-21 | | | | X | X | | | |
| H-17 | Homebound | | | | 6-21 | | | | | X | | |
| H-25 | Other Health Impaired (more than 1 handicap per class) | | 6-12 | 13-21 | | | X | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state.

State Name: New Mexico

Enrollments In Special Education

Date Period 1969-1970

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential School | Day Special Class | Cooperative Class | Itinerant | | |
| H-3 | Visually Handicapped | Preschool | 3 | | | | | NO DATA AVAILABLE |
| | | Elementary | 54 | | | | | |
| | | Secondary | 71 | | | | | |
| H-6 | Hearing Handicapped | Preschool | 44 | 1 | | | | |
| | | Elementary | 150 | 26 | | | | |
| | | Secondary | 44 | | | | | |
| H-7 | Emotionally Disturbed | Preschool | | 1 | | | | |
| | | Elementary | | 91 | 48 | | | |
| | | Secondary | 80 | 162 | 24 | | | |
| | | All Grades | 180 | | | | | |
| H-8 | Mentally Retarded. | Elementary | | 58 | | | | |
| | | Secondary | | 48 | | | | |
| H-9 | Educable Mentally Retarded | Elementary | 46 | 1182 | 492 | | | |
| | | Secondary | 76 | 870 | 344 | | | |
| | | All Grades | | 68 | | | | |
| H-10 | Trainable Mentally Retarded | Elementary | 123 | 128 | 50 | | | |
| | | Secondary | 108 | 45 | | | | |
| | | All Grades | | 102 | | | | |
| H-12 | Speech Handicapped | All Grades | | | | * | | |
| H-14 | Special Learning Disabilities | All Grades | | 48 ** | | | | |
| H-16 | Physically Handicapped | Elementary | | 42 | 28 | | | |
| | | Secondary | | 14 | | | | |

* No data available, program not officially special education
** Experimental programs - handicap in process of being legalized

State Name: New Mexico

Enrollments In Special Education

Date Period 1969-1970

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential School | Day Special Class | Cooperative Class | Itinerant | | |
| H-17 | Homebound | All Grades | | | | 188 | | NOT AVAILABLE |
| H-25 | Other Health Impaired | Elementary | | 119 | | | | |
| | | Secondary | | 294 | 27 | | | |

New Mexico

State Name: New Mexico Personnel/Pupil Contact Ratio Data Period 1969-1970

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Resi-dential School | Day Special Class | Coopera-tive Class | Itinerant | |
| H-3 | Visually Handicapped | Teacher | Preschool | 1/6 | | | | |
| | | | Elementary | 1/8 | 1/12 | | | |
| | | | Secondary | 1/8 | 1/12 | | | |
| H-6 | Hearing Handicapped | Teacher | Preschool | 1/5 | | | | |
| | | | Elementary | 1/8 | 1/12 | | | |
| | | | Secondary | 1/8 | 1/12 | | | |
| H-7 | Emotionally Disturbed | Teacher | All Grades | 1/10 | 1/8 | 1/12 | | |
| | | Aide | Elementary | | 1/8 | | | |
| H-8 | Mentally Retarded | Teacher | All Grades | | 1/10 | | | |
| | | Aide | All Grades | | 1/10 | | | |
| H-9 | Educable Mentally Retarded | Teacher | All Grades | 1/18 | 1/12 | | | |
| | | Aide | Elementary | 1/18 | 1/12 | | | |
| | | | Secondary | 1/18 | | | | |
| H-10 | Trainable Mentally Retarded | Teacher | All Grades | 1/16 | 1/10 | | | |
| | | Aide | All Grades | 1/16 | 1/10 | | | |
| H-14 | Special Learning Disability | Teacher | All Grades | | 1/12 * | | | |
| H-16 | Physically Handicapped | Teacher | All Grades | 1/12 | 1/12 | 1/14 | | |
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* This handicap category is in process of being defined

State Name: **New Mexico** Special Education Personnel Estimated Requirements/Employment Comparison Data Period 1969-1970

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | Uk | X | .5 | 1 | 7 2/ | 8 | 9 2/ | 14 | | | | | 16.5 2/ | 23 |
| T/Hearing Handicapped | Uk | X | 9 2/ | 11 | 21 | 21 | 6 | 6 | | | | | 36 2/ | 38 |
| T/Emotionally Disturbed | Uncer-tified | | | | | 15 | | 16 | | | | 1 | | 32 |
| | Uk | X | | | | | | 9 | | | | 13 | | 22 |
| | Total | | | | 15 | 15 | 33 | 25 | | | 18 | 14 | 66 | 54 |
| A/Emotionally Disturbed | Uk | | | | 11 | 4/ | | | | | 3/ | 2 | 11 | 2 |
| T/Mentally Retarded | Uk | X | | | 127 2/ | 146 | 93 2/ | 106 | | | 16 | 30 | 236 2/ | 282 |
| A/Mentally Retarded | Uk | | | | 127 | 2 | 20 | 2 | | | 10 | 19 | 157 | 23 |
| T/Special Learning Disabilities | Uk | X | | | | | | | | | 4 | 4 | 4 | 4 |
| T/Physically Handicapped | Uk | X | | | 6 | 6 | 1 | 1 | | | | | 7 | 7 |
| T/Homebound | Uk | | | | | | | | | | 3/ | 15 | 3/ | 15 |
| T/Other Health Impaired | Uk | X | | | 3/ | 10 | 3/ | 25 | | | | | 3/ | 35 |
| | | | | | | | | | | | | | | |
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1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations incomplete due to missing data
3/ Calculations cannot be made due to missing data
4/ Employment data unavailable

Uk - Unknown

NO SPECIAL EDUCATION DATA

WAS PROVIDED BY NEW YORK STATE

State Name North Carolina Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | | | Residential Special Class | Resource Room | Itinerant | Block Class (Part-Time) | Self-Contained (Full-Time) | |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | | 6-12 | 13-18 | | | | | | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | 1-5 | 6-12 | 13-18 | | | | | | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally Disturbed | | 6-12 | 13-18 | | | | | | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 6-12 | 13-18 | | | | | | | | |
| H-10 | TMR | | 6-12 | 13-18 | | | | | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | 6-12 | 13-18 | | | | | | | | |
| H-13 | Speech and Learning | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | 6-12 | 13-18 | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped (Crippled) | | 6-12 | 13-18 | | | | | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

NO DATA PROVIDED

1/ If no entry is shown, category is not applicable to the state.

State Name: North Carolina Enrollments In Special Education Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Resource Room | Itinerant | Block Class (Part-time) | Self-Contained (Full-time) | |

NO DATA AVAILABLE

State Name: North Carolina　　Personnel/Pupil Contact Ratio　　Data Period 1968 - 1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Resource Room | Itirerant | Block Class (Part-time) | Self Contained (Full-time) |
| H-3 | Visually Handicapped | Teacher | All Grades* | | | | | |
| H-6 | Hearing Handicapped | Teacher | All Grades | | | | 1/6 | |
| H-7 | Emotionally Distrubed | Teacher | All Grades | | 1/25 | | | 1/10 |
| H-9 | Educable Mentally Retarded | Teacher | Elementary | | | | | 1/12-1/16 |
| | | | All Grades | | 1/8 | | | |
| H-10 | Trainable Mentally Retarded | Teacher | All Grades | | | | | 1/12 |
| H-11 | MR (Custodial) Severe, Institutionalized | Teacher | All Grades | | | | | |
| H-12 | Speech Handicaps | Teacher | All Grades | | | 1/100 | | |
| H-14 | Special Learning Disabilities | Teacher | All Grades | | 1/25 | | | 1/10 |
| H-16 | Physically Handicapped | Teacher | All Grades | | | 1/6-1/12 | | |

* Small Class.

State Name: North Carolina Special Education Personnel Estimated Requirements/Employment Comparison Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T-Emotionally Disturbed | BA | x | | | | | | | | | | 17 | | 17 |
| | MA | x | | | | | | | | | | 3 | | 3 |
| | Uk | | | | | | | | | | | 9 | | 9 |
| | Total | | | | | | | | | | 1/ | 29 | 1/ | 29 |
| A-Emotionally Distrubed | BA | x | | | | | | | | | | 2 | | 2 |
| | None | x | | | | | | | | | | 5 | | 5 |
| | Total | | | | | | | | | | 1/ | 7 | 1/ | 7 |
| Th-Occupational | BA | x | | | | | | | | | | 1 | 1/ | 1 |
| T-EMR | Uk | | | | | | | | | | | 31 | 1/ | 31 |
| T-TMR | None | | | | | | | | | | | 29 | | 29 |
| | Uk | | | | | | | | | | | 2 | | 2 |
| | Total | | | | | | | | | | 1/ | 31 | 1/ | 31 |
| T-Mentally Retarded | BA | x | | | | | | | | | | 9 | | 9 |
| | MA | x | | | | | | | | | | 2 | | 2 |
| | None | | | | | | | | | | | 4 | | 4 |
| | Total | | | | | | | | | | 1/ | 13 | 1/ | 13 |
| A-Phychologist | BA | | | | | | | | | | 1/ | 1 | 1/ | 1 |

1/ Calculations cannot be made due to missing data.
Uk - Unknown

State Name: North Dakota Overview of Special Education Programs Data Period 1968-69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Elementary | Secondary | Ungraded | | | Residential School | Special School | Day Special Class | Resource Room | Itinerant | Supplementary Instruction |
| H-1 | Blind | 6-14 | 15-21 | | | | X | | | X | | |
| H-2 | Partially Sighted | 6-14 | 15-21 | | | | X | | | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 5-14 | 15-20 | | | | X | | | | | |
| H-5 | Hard of Hearing | 6-14 | 15-21 | | | | X | | X | | | X |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally Disturbed | 6-14 | 15-21 | | | | X | | | | X | X |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 6-14 | 15-21 | | | | X | | X | | | |
| H-10 | TMR | 6-14 | 15-21 | 6-21 | | | X | X | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | 6-21 | | | | | | | X | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | 6-14 | 15-21 | | | | | | | X | | X |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | 6-14 | 15-21 | | | | X | | | | X | |
| H-17 | Homebound (included in itinerant) | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

North Dakota has Deaf-Blind Children - but no program in state.

1/ If no entry is shown, category is not applicable to the state

State Name:North Dakota

Enrollments In Special Education

Date Period 1968- 69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type: Residential School | Special School | Day Special Class | Resource Room | Itinerant | Supplementary Instruction | Waiting List |
|---|---|---|---|---|---|---|---|---|---|
| H-1 | Blind | Elementary | 3 | | | 8 | | | Special Education Director makes rough estimate of approximately 2900 children in all areas. |
| | | Secondary | 7 | | | 6 | | | |
| H-2 | Partially | Elementary | 19 | | | | | | |
| | | Secondary | 8 | | | | | | |
| H-4 | Deaf | Elementary | 55 | | | | | | |
| | | Secondary | 24 | | | | | | |
| H-5 | Hard of Hearing | Elementary | 8 | | 6 | | | 7 | |
| | | Secondary | 10 | | 0 | | | 0 | |
| H-7 | Emotionally Disturbed | Elementary | 19 | | | | 4 | 8 | |
| | | Secondary | 77 | | | | 4 | 8 | |
| H-9 | EMR | Elementary | 13 | | 817 | | | | |
| | | Secondary | 44 | | 191 | | | | |
| H-10 | TMR | Elementary | 73 | | 38 | | | | |
| | | Secondary | 95 | | 0 | | | | |
| | | Ungraded | | 61 | | | | | |
| H-12 | Speech Handicaps | Ungraded | | | | | 4004 | | |
| H-14 | Special Learning Disabilities | Elementary | | | | 244 | | 32 | |
| H-16 | Physically Handicapped | Elementary | 53 | | | | 125 | | |
| | | Secondary | 36 | | | | 63 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

North Dakota

State Name: North Dakota  Personnel/Pupil Contact Ratio  Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Resi-dential School | Special School | Day Special Class | Resource Room | Itinerant | Supple-mentary Instruc-tion |
| H-1 | Blind | Teacher | Elementary | none | | | 1/6 | | |
| | | Teacher | Secondary | none | | | 1/10 | | |
| H-2 | Partially Sighted | Teacher | Elementary | none | | | | | |
| | | Teacher | Secondary | none | | | | | |
| H-3 | Visually Handicapped | Teacher | Elementary | none | | | | | |
| | | Teacher | Secondary | none | | | | | |
| | | Teacher | All Grades | none | | | | | |
| | | Teacher/Braille | All Grades | none | | | | | |
| H-5 | Hard of Hearing | Teacher | Elementary | | | $\frac{1}{6-10}$ | | | |
| | | Teacher/Supplementary | Elementary | | | | | | 1/10 |
| H-6 | Hearing Handicapped | Teacher | Elementary | none | | | | | |
| | | Teacher | Secondary | none | | | | | |
| | | Teacher | All Grades | none | | | | | |
| H-7 | Emotionally Disturbed | Teacher | Elementary | 1/6-15 | | | | | |
| | | Teacher | Secondary | 1/6-15 | | | | | |
| | | Teacher/Homebound | Elementary | | | | | 1/5 day | |
| | | | Secondary | | | | | 1/5 day | |
| | | Teacher/Supplementary | Elementary | | | | | | 1/10 |
| | | | Secondary | | | | | | 1/10 |
| | | Visiting Counselor | All Grades | | | | | 1/35 case load | |
| H-8 | Mentally Retarded | Teacher | All Grades | none | | | | | |
| H-9 | EMR | Teacher | Elementary | | | $\frac{1}{6-15}$ | | | |

State Name: North Dakota    Personnel/Pupil Contact Ratio    Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Resi-dential School | Special School | Day Special | Resource Room | Itinerant | Supple-mentary Instruc-tion |
| H-9 | EMR (cont.) | Teacher | Secondary | | | 1/6-15 | | | |
| H-10 | TMR | Teacher | Elementary | | | 1/6-12 | | | |
| | | Teacher | All Grades | | none | | | | |
| | | Visiting Counselor | All Grades | | | | | | |
| | | Speech Therapist | All Grades | | | | | | |
| H-12 | Speech Handicaps | Therapist | All Grades | | | | | 1/80-80/wk | |
| H-14 | Special Learning Disabilities | Teacher | Elementary | | | | 1/10 | | |
| | | Supplementary Teacher | Elementary | | | | | | 1/10 |
| H-16 | Physically Handicapped | Teacher | Elementary | 1/7-14 | | | | | |
| | | Teacher | Secondary | 1/20-22 | | | | | |
| | | Teacher/Homebound | Elementary | | | | | 1/5 day | |
| | | | Secondary | | | | | 1/5 day | |
| | | Speech Therapist | All Grades | | | | | | |
| | | Physical Therapist | All Grades | | | | | | |
| | | Occupational Therapist | All Grades | | | | | | |
| | | Rehabilitation Counselor | All Grades | | | | | | |
| | | Remedial Evaluator | All Grades | | | | | | |
| | | Psychologist | All Grades | | | | | | |
| | | Nurse | All Grades | | | | | | |
| | All Handicaps | Psychologist | All Grades | | | | | 1/10 case load | |
| | | Social Worker | All Grades | | | | | 1/35 case load | |
| | | Psychometrist | All Grades | | | | | 1/35 case load | |

State Name: North Dakota

Special Education Personnel Estimated Requirements/Employment Comparison[1]

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Preschool Esti-mated | Preschool Employed | Elementary Esti-mated | Elementary Employed | Secondary Esti-mated | Secondary Employed | Ungraded Esti-mated | Ungraded Employed | Unspecified Esti-mated | Unspecified Employed | Total Esti-mated | Total Employed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T/Visually Handicapped | BA | X | | | | 2 | | 1 | | | | | | 3 |
| | Uk | X | | | | 2 | | 3 | | | | 3 | | 8 |
| | Total | | | | 1[2] | 4 | 1[2] | 4 | | | [3] | 3 | 2[2] | 11 |
| T/Hearing Handicapped | Uncertified | | | | | 7 | | | | | | | | 7 |
| | BA | X | | | | 1 | | | | | | | | 1 |
| | Uk | X | | | | 7 | | 4 | | | | 5 | | 16 |
| | Total | | | | 2[2] | 15 | [3] | 4 | | | [3] | 5 | 2[2] | 24 |
| T/Emotionally Disturbed | BA | X | | | | 1 | | 6 | | | | | | 7 |
| | Uk | X | | | | 197 | | | | | | | | 197 |
| | Total | | | | 3[2] | 198 | 7-13[2] | 6 | | | | | 10-16[2] | 204 |
| O/Counselor Emotionally Disturbed | MA | X | | | | | | 1 | | | | 10 | | 11 |
| | Total | | | | | | [3] | 1 | | | 1 | 10 | 1 | 11 |
| T/Mentally Retarded | Uk | X | | | | | | | | | [3] | 10 | [3] | 10 |
| T/EMR | None | X | | | | 41 | | 4 | | | | | | 45 |
| | BA | X | | | | 41 | | 12 | | | | | | 53 |
| | Uk | X | | | | | | | | | | 10 | | 10 |
| | Total | | | | 54-136[2] | 82 | 12-31[2] | 16 | | | | 10 | 66-167[2] | 108 |
| T/TMR | None | X | | | | 6 | | | | | | | | 6 |
| | Uk | | | | | | | | | | | 10 | | 10 |
| | Total | | | | 3-6 | 6 | [3] | | | | | 10 | 3-6[2] | 16 |

[1] Based upon enrollment data only (no waiting list data available)

[2] Calculations incomplete due to missing data

[3] Calculation cannot be made due to missing data

Uk-Unknown

State Name: North Dakota Special Education Personnel Estimated Requirements/Employment Comparison[1] (cont.) Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| Th/Speech for TMR | Uk | | | | | | | | | | [3] | 1 | [3] | 1 |
| Th/Speech | BA | X | | | | | | | | | | 45 | | 45 |
| | Uk | X | | | | | | | | | | 10 | | 10 |
| | Total | | | | | | | | | | 50-66 | 55 | 50-66 | 55 |
| T/Special Learning Disabilities | None | X | | | | 2 | | | | | | | | 2 |
| | BA | X | | | | 28 | | | | | | | | 28 |
| | MA | X | | | | 2 | | | | | | | | 2 |
| | Total | | | | 27 | 32 | | | | | | | 27 | 32 |
| T/Physically Handicapped | Uk | | | - | 28-33 | 176 | 14-17 | 9 | | | | | 42-50[2] | 185 |
| O/Social Worker | BA | X | | | | | | | | | | 1 | [3] | 1 |
| O/Psychometrist | MA | X | | | | | | | | | | 2 | [3] | 2 |

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1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations incomplete due to missing data
3/ Calculation cannot be made due to missing data
Uk-Unknown

State Name: Ohio Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | | | Residential | Day Special Class | Cooperative Special Class | Itinerant | Unspecified Program | |
| H-1 | Blind | | | | | | X | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | | 6-13 | 13-21 | | | | X | | X | | |
| H-4 | Deaf | 3-5 | 6-13 | 13-21 | | | X | X | | | | |
| H-5 | Hard of Hearing | 3-5 | 6-13 | 13-21 | | | | X | X | X | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally Disturbed | | 6-13 | 13-21 | | | | | | | X | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 6-14 | 15-21 | | | | X | | | | |
| H-10 | TMR | | | | | | | | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | | | | | | | | |
| H-13 | Speech and Hearing | | 6-12 | 13-21 | | | | | | | X | |
| H-14 | Special Learning Disabilities | | 6-12 | 13-21 | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | 6-13 | 13-21 | | | X | X | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| H-26 | Neurologically Handicapped | | | | | | | X | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state.

State Name: Ohio          Enrollments In Special Education          Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Day Special Class | | | | |
| H-3 | Visually Handicapped | Ungraded | | 727 | | | | |
| H-4 | Deaf | Ungraded | | 1551 | | | | |
| H-7 | Emotionally Disturbed | Ungraded | | 1127 | | | | |
| H-9 | EMR | Ungraded | | 38746 | | | | |
| H-15 | Brain Injured | Ungraded | | 1477 | | | | |
| H-16 | Physically Handicapped | Ungraded | 329 | 1145 | | | | |

State Name: Ohio  Personnel/Pupil Contact Ratio  Data Period 1968 - 1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residen-tial | Day Special Class | Coopera-tive Special Class | Resource Room | Itinerant |
| H-3 | Visually Handicapped | Teacher | Elementary | | 1/8-1/12 | | | |
| | | | Secondary | | 1/8-1/14 | | | |
| | | | Ungraded | | | | 1/8-1/16 | 1/8 |
| H-4 | Deaf | Teacher | Preschool | | 1/6-1/8 | | | |
| | | | Elementary | | 1/6-1/8 | | | |
| | | | Secondary | | 1/6-1/12 | | | |
| H-5 | Hard of Hearing | Teacher | Ungraded | | 1/8-1/10 | 1/8-1/12 | | |
| H-7 | Emotionally Disturbed | Teacher | Ungraded | 1/8-1/12 | 1/6-1/15 | 1/6-1/15 | | |
| H-9 | EMR | Teacher | Elementary | | 1/12-1/20 | | | |
| | | | Secondary | | 1/12-1/22 | 1/12-1/30 | | |
| H-16 | Physically Handicapped (Crippled) | Teacher | Elementary | | 1/8-1/18 | | | |
| | | | Secondary | | 1/8-1/8 | | | |
| | | | Ungraded | | 1/8-1/12 | | | |
| | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |

State Name: Ohio

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | Uncer-tified | | | | | | | | | | | 16 | | 16 |
| | Uk | X | | | | | | | | | | 56 | | 56 |
| | Total | | | | | | | | | | 2/ | 72 | 2/ | 72 |
| T/Hearing Handicapped | Uncer tified | | | | | | | | | | | 60 | | 60 |
| | Uk | X | | | | | | | | | | 166 | | 166 |
| | Total | | | | | | | | | | 2/ | 226 | 2/ | 226 |
| T/Emotionally Disturbed | Uk | X | | | | | | | 75-187 | 3/ | | | 75-187 | 3/ |
| T/Crippled | Uk | X | | | | | | | 95-143 | 3/ | | | 95-143 | 3/ |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations cannot be made due to missing data
3/ Employment data unavailable
Uk - Unknown

State Name: Oklahoma    Overview of Special Education Programs    Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) |  |  |  |  | Education Program |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Preschool | Elementary | Secondary | All Grades |  | Residential School | Day Special Class | Cooperative Class | Itinerant |  |  |
| H-1 | Blind |  |  |  |  |  |  |  |  |  |  |  |
| H-2 | Partially Sighted |  |  |  |  |  |  |  |  |  |  |  |
| H-3 | Visually Handicapped | 2-5 |  |  | 6-21 |  | X | X |  |  |  |  |
| H-4 | Deaf |  |  |  |  |  |  |  |  |  |  |  |
| H-5 | Hard of Hearing |  |  |  |  |  |  |  |  |  |  |  |
| H-6 | Hearing Handicapped | 2-5 |  |  | 6-21 |  | X | X |  |  |  |  |
| H-7 | Emotionally Disturbed |  |  |  | 6-21 |  |  | X |  |  |  |  |
| H-8 | Mentally Retarded |  |  |  |  |  |  |  |  |  |  |  |
| H-9 | EM Handicapped | 2-5 | 6-11 | 12-21 |  |  | X * | X | X |  |  |  |
| H-10 | TMR | 2-5 |  |  | 6-21 |  |  | X |  |  |  |  |
| H-11 | MR (Custodial, Severe, Institutional) |  |  |  |  |  |  |  |  |  |  |  |
| H-12 | Speech Correction |  |  |  | 6-21 |  |  |  |  | X |  |  |
| H-13 | Speech and Hearing |  |  |  |  |  |  |  |  |  |  |  |
| H-14 | Learning Disabilities |  |  |  | 6-21 |  |  | X |  |  |  |  |
| H-15 | Brain Injured |  |  |  |  |  |  |  |  |  |  |  |
| H-16 | Physically Handicapped |  |  |  | 6-21 |  | X | X |  |  |  |  |
| H-17 | Homebound |  |  |  | 6-21 |  |  |  |  | X |  |  |
| H-18 | Multiple Handicapped | 2-5 |  |  |  |  |  |  |  | X |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

*Private School

1/ If no entry is shown, category is not applicable to the state.

Oklahoma

State Name: Oklahoma　　Enrollments In Special Education　　Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type: Residential School | Day Special Class | Cooperative Class | Itinerant | Estimate of unserved population* | Waiting List |
|---|---|---|---|---|---|---|---|---|
| H3 | Visually Handicapped | Unspecified | 135 | 44 | | | 944 | NOT AVAILABLE |
| H6 | Hearing Handicapped | Unspecified | 241 | 116 | | | 6048 | |
| H7 | Emotionally Disturbed | Unspecified | | 89 | | | 9616 | |
| H9 | Educable Mentally Handicapped | Preschool | 41** | | | | | |
| | | Elementary | | 2878 | | | | |
| | | Secondary | | 1235 | 766 | | | |
| | | Unspecified | 22** | 401 | | | 9135 | |
| H10 | Trainable Mentally Retarded | Unspecified | | 808 | | | 1232 | |
| H12 | Speech Correction | Unspecified | | | | 7817 | 19295 | |
| H14 | Learning Disabilities | Unspecified | | 301 | | | 9472 | |
| H16 | Physically Handicapped | Unspecified | 8 | 152 | | | 936 | |
| H17 | Homebound | Unspecified | | | | 873 | | |
| H18 | Multiple Handicapped | Unspecified | | | | 12 | | |

* Based upon prevalence rates
** Private School

State Name: Oklahoma Personnel/Pupil Contact Ratio Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential School | Day Special Class | Cooperative Class | Itinerant | |
| H3 | Visually Handicapped | Teacher | All Grades | 1/5 | 1/8 | | | |
| H6 | Hearing Handicapped | Teacher | All Grades | 1/6 | 1/8 | | | |
| H7 | Emotionally Disturbed | Teacher | All Grades | | 1/8 | | | |
| H9 | Educable Mentally Handicapped | Teacher (Mentally Handicapped) | Preschool | 1/20 | | | | |
| | | | Elementary | | 1/15 | | | |
| | | | Secondary | | 1/15 | 1/30 | | |
| | | | All Grades | 1/7 | 1/15 | | | |
| | | Vocational Instructor | Secondary | | 1/40 | | | |
| | | | All Grades | 1/10 | 1/40 | | | |
| H10 | Trainable Mentally Retarded | T/ Mentally Handicapped | All Grades | | 1/8 | | | |
| H12 | Speech Correction | Speech Therapist | All Grades | | | | 1/85 | |
| H14 | Learning Disabilities | Teacher | All Grades | | 1/8 | | | |
| H16 | Physically Handicapped | Teacher | All Grades | 1/4 | 1/8 | | | |
| | | Physical Therapist | All Grades | | 1/40 | | | |
| H17 | Homebound | Teacher (Visiting) | All Grades | | | | 1/20 | |
| H18 | Multiple Handicapped | Teacher | All Grades | | | | 1/12 | |
| | | Social Worker | All Grades | | | | 1/12 | |

State Name: Oklahoma

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-1969

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed |
| T/Visually Handicapped | Uk | X | | | | | | | | | 49 | 30 | 49 | 30 |
| T/Hearing Handicapped | Uk | X | | | | | | | | | 55 | 58 | 55 | 58 |
| T/Emotionally Disturbed | Uk | X | | | | | | | | | 11 | 11 | 11 | 11 |
| T/Mentally Handicapped | Uk | X | 2 | 2 | 192 | 222 | 108 | 125 | | | 131 | 93 | 433 | 442 |
| Vocational Instructor | Uk | | | | | | 31 | 2/ | | | 12 | 2 | 43 | 2 |
| Th/Speech | Uk | X | | | | | | | | | 92 | 87 | 92 | 87 |
| T/Children with Learning Dis. | Uk | X | | | | | | | | | 38 | 36 | 38 | 36 |
| T/Physically Handicapped | Uk | X | | | | | | | | | 21 | 18 | 21 | 18 |
| Th/Physical | Uk | X | | | | | | | | | 7 | 2/ | 7 | 2/ |
| T/Visiting | Uk | X | | | | | | | | | 44 | 35 | 44 | 35 |
| T/Multiply Handicapped | Uk | X | | | | | | | | | 1 | 1 | 1 | 1 |
| O/Social Worker | Uk | X | | | | | | | | | 1 | 1 | 1 | 1 |

1/ Based upon enrollment data only (no waiting list data available)

2/ Employment data not available

Uk - Unknown

State Name: Oregon Overview of Special Education Programs Data Period 1967-1968

| Handicap Code | Handicap Category [1] | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Ungraded | Unspecified | Residential | Day Special Class | Resource Room | Itinerant | Hospital: Rapid Turnover | |
| H-1 | Blind | | 6-12 | 13-21 | | | X | | | X | | |
| H-2 | Partially Sighted | | 6-12 | 13-21 | | | | | | X | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 3-5 | 6-12 | 13-21 | | | X | X | X | X | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally Disturbed [2] | | 6-12 | 13-21 | | | X | X | | | X | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 3-5 | 6-14 | 15-21 | 6-21 | | X | X | | | | |
| H-10 | TMR | 3-5 | 6-14 | 15-21 | | | X | X | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | 3-5 | | | | 6-21 | | | | X | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities [3] | | 6-14 | | | | | | | X | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | 3-5 | 6-12 | 13-21 | | | X | | | | X | |
| H-17 | Homebound | | | | | | | | | | | |
| H-20 | Chronic Conditions | | 6-12 | 13-21 | | | | | | | X | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Oregon

[1] If no entry is shown, category is not applicable to the state
[2] Called "socially and emotionally maladjusted"
[3] Called "extreme learning problems"
[4] Also called "Crippled-Orthopedic"

State Name: Oregon Enrollments In Special Education Data Period 1967 - 1968

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Day Special Class | Resource Room | Itinerant | Hospital Rapid Turnover | |
| H-1* | Blind | Preschool | 12 | | | | | DATA INCOMPLETE |
| | | Elementary | 39 | | | | | |
| | | Secondary | 44 | | | | | |
| | | Ungraded | | | | 105 | | |
| H-2 | Partially Sighted | Unspecified | | | | 446 | | |
| H-4* | Deaf | Preschool | 43 | 24 | | | | |
| | | Elementary | 140 | 85 | | 35 | | |
| | | Secondary | 90 | | 19 | | | |
| | | Unspecified | | 163 | | | | |
| H-7 | Emotionally Disturbed | Elementary | 33 | 52 | | | | |
| | | Secondary | 161 | | | | 70 | |
| H-9 | EMR | Preschool | 70 | | | | | 612 |
| | | Elementary | 79 | 3152 | | | | |
| | | Secondary | 83 | 1128 | | | | |
| | | Ungraded | 8 | | | | | 8790 |
| H-10 | TMR | Unspecified | 195 | | | | | 2255 |
| H-12 | Speech Handicaps | Preschool | | | | 249 | | |
| | | Elementary | | | | 8928 | | |
| | | Secondary | | | | 228 | | |
| H-14 | Special Learning Disabilities | Elementary | | | | 5140 | | |
| H-16 | Physically Handicapped | Preschool | | 20 | | | | |
| | | Elementary | | 82 | | | 230 | |

*Deaf and Blind data for residential program is 1968-1969

State Name: Oregon Enrollments In Special Education Data Period 1967 - 1968

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Day Special Class | Resource Room | Itinerant | Hospital Rapid Turnover | |
| H-16 | Physically Handicapped | Secondary | | | | | 25 | NOT AVAILABLE |
| | | Unspecified | | | | | 255 | |
| H-20 | Chronic Conditions | Elementary | | | | | 470 | |
| | | Secondary | | | | | 50 | |
| | | Unspecified | | | | | 590 | |

Oregon

State Name: Oregon Personnel/Pupil Contact Ratio Data Period 1967- 1968

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential Special Class | Day Special Class | Resource Room | Hospital Rapid Turnover | Itinerant |
| H-1 | Blind | Teacher | Preschool | 1/6 | | | | |
| | | | Elementary | 1/6 | | | | |
| | | | Secondary | 1/6 | | | | |
| | | | All Grades | | | | | 1/9 |
| | | Counselor | Preschool | | | | | 1/80 |
| H-2 | Partially Sighted | Teacher | All Grades | | | | | 1/30 |
| H-4 | Deaf | Teacher | Preschool | 1/6 | 1/12 | | | |
| | | | Elementary | 1/6 | 1/8 | | | 1/10 |
| | | | Secondary | 1/6 | | 1/9 | | |
| | | | All Grades | | 1/8 | | | |
| | | Aide | Preschool | 1/6 | | | | |
| H-7 | Emotionally Disturbed | Teacher | Elementary | 1/40 | 1/8 | | | |
| | | | Secondary | 1/40 | | | 1/40 | |
| | | Aide | Elementary | | 1/10 | | | |
| H-9 | EMR | Teacher | Preschool | 1/23 | | | | |
| | | | Elementary | 1/20 | 1/15 | | | |
| | | | Secondary | 1/21 | 1/18 | | | |
| | | | Ungraded * | 1/8 | | | | |
| H-10 | TMR | Teacher | All Grades | 1/8 | | | | |
| H-12 | Speech Handicaps | Speech Correctionist | Preschool | | | | | 1/70 |
| | | | Elementary | | | | | 1/70 |
| | | | Secondary | | | | | 1/70 |

* Includes multiple handicapped

State Name: Oregon Personnel/Pupil Contact Ratio Data Period 1967-1968

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential Special Class | Day Special Class | Resource Room | Hospital Rapid Turnover | Itinerant |
| H-14 | Special Learn. Disabilities | Teacher | Elementary | | | | | 1/20 |
| H-16 | Physically Handicapped | Teacher | Preschool | | 1/8 | | | |
| | | | Elementary | | 1/10 | | | |
| | | | Secondary | | | | 1/25 | |
| | | | All Grades | | | | 1/25 | |
| | | Occupational Therapist | Preschool | | 1/35 | | | |
| | | | Elementary | | 1/37 | | | |
| | | Physical Therapist | Preschool | | 1/20 | | | |
| | | | Elementary | | 1/20 | | | |
| H-20 | Chronic Conditions | Teacher/Physical Handicapped | Elementary | | | | 1/160 | |
| | | | Secondary | | | | 1/120 | |
| | | | All Grades | | | | 1/150 | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |
| | | | | | | | | |

State Name: Oregon Special Education Personnel Estimated Requirements/Employment Comparison Data Period 1968-1969

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level: Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind | Uk | X |  | 2 |  | 5 |  | 6 |  |  |  | 11 |  | 24 |
|  | Total |  | 2 | 2 | 6 | 5 | 7 | 6 |  |  | 11 | 11 | 27 | 24 |
| O/Preschool Counselor | Uk |  |  | 1 |  |  |  |  |  |  |  |  |  | 1 |
|  | Total |  | 2/ | 1 |  |  |  |  |  |  |  |  | 2/ | 1 |
| T/Partially Sighted | Uk | X |  |  |  | 14 |  |  |  |  |  |  |  | 14 |
|  | Total |  |  |  | 2/ | 14 |  |  |  |  | 14 | 3/ | 14 | 14 |
| T/Deaf | Uk | X |  | 9 |  | 42 |  | 32 |  |  |  |  |  | 83 |
|  | Total |  | 9 | 9 | 37 | 42 | 17 | 32 |  |  | 20 | 3/ | 83 | 83 |
| A/Deaf | Uk |  |  | 1 |  |  |  |  |  |  |  |  |  | 1 |
|  | Total |  | 7 | 1 |  |  |  |  |  |  |  |  | 7 | 1 |
| T/Emotionally Disturbed | Uk | X |  |  |  | 19 |  | 6.5 |  |  |  |  |  | 25.5 |
|  | Total |  |  |  | 8 | 19 | 6 | 6.5 |  |  |  |  | 14 | 25.5 |
| A/Emotionally Disturbed | Uk |  |  |  |  | 6 |  |  |  |  |  |  |  | 6 |
|  | Total |  |  |  | 5 | 6 |  |  |  |  |  |  | 5 | 6 |
| T/EMR and TMR |  |  |  |  |  | 18 |  | 1 |  |  |  |  |  | 19 |
|  | Uk | X |  | 3 |  | 239 |  | 78 |  | 1 |  |  |  | 321 |
|  | Total |  | 29 | 3 | 214 1/ | 257 | 67 1/ | 79 | 278 | 1 | 36 | 3/ | 625 1/ | 340 |
| O/Speech Correctionist | Uk | X |  | 3 |  | 125 |  | 3 |  |  |  |  |  | 131 |
|  | Total |  | 3 | 3 | 217 | 125 | 3 | 3 |  |  |  |  | 133 | 131 |
| T/Extreme Learning Problems | Uk | X |  |  |  | 250 |  |  |  |  |  |  |  | 250 |
|  | Total |  |  |  | 257 | 250 |  |  |  |  |  |  | 257 | 250 |

1/ Calculation incomplete due to missing data
2/ Calculation cannot be made due to missing data
3/ Employment data unavailable
Uk-Unknown

State Name: Oregon Special Education Personnel Estimated Requirements/Employment Comparison Data Period 1968-1969

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Physically Handicapped | Uk | X | | 2 | | 17 | | 17 | | | | | | 36 |
| | Total | | 2 | 2 | 20 | 17 | 1 | 17 | | | 14 | 1/ | 37 | 36 |
| Th/Physical | Uk | X | | | | | | | | | | 4 | | 4 |
| | Total | | 1 | 1/ | 4 | 1/ | | | | | 2/ | 4 | 5 | 4 |
| Th/Occupations | Uk | X | | | | | | | | | | 3 | | 3 |
| | Total | | .5 | 1/ | 2 | 1/ | | | | | 2/ | 3 | 2.5 | 3 |

1/ Employment data unavailable
2/ Calculation cannot be made due to missing data
Uk-Unknown

State Name: Pennsylvania Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Elementary | | Secondary | | | | | | | | |
| | | Pri. | Inter. | Jr. H. | Sr. H. | | Residential | Special Schools | Day Special Class | Cooperative Special | Itinerant | |
| H-1 | Blind | 7-9 | 10-12 | 13-15 | 16-18 | | | X | X | | | |
| H-2 | Partially Sighted | 7-9 | 10-12 | 13-15 | | | | | | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally | | | | | | | | | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | | | | | | | | | | |
| H-10 | TMR | | | | | | | | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | | | | | | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | | | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | | | | | | | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state.

State Name: Pennsylvania　　Enrollments In Special Education　　Data Period1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Class | Special Schools | Day Special | Cooperative Special | Itinerant | |
| H-1 | Blind | Preschool | | 62 | | | | NOT AVAILABLE |
| | | Elementary | | 309 | 258 | | | |
| | | Secondary | | 247 | 248 | | | |
| H-2 | Partially Sighted | Elementary | | | | | 1124 | |
| | | Secondary | | | | | 339 | |
| H-4 | Deaf | Preschool | | 111 | | | | |
| | | Elementary | | 554 | 310 | | | |
| | | Secondary | | 443 | 118 | | | |
| H-5 | Hard of Hearing | Elementary | | | | | 370 | |
| | | Secondary | | | | | 598 | |
| H-7 | Emotionally Disturbed | Preschool | | 212 | | | | |
| | | Elementary | | 1061 | 825 | | | |
| | | Secondary | | 848 | 841 | | | |
| H-9 | EMR | Elementary | | | 19,324 | | | |
| | | Secondary | | | 21,667 | | | |
| H-10 | TMR | Elementary | | | 3,130 | | | |
| | | Secondary | | | 1,656 | | | |
| H-12 | Speech Handicaps | Elementary | | | | | 32,392 | |
| | | Secondary | | | | | 923 | |
| H-13 | Speech and Hearing | Elementary | | | | | 27,606 | |
| | | Secondary | | | | | 241 | |
| H-15 | Brain Injured | Elementary | | | 1,656 | | | |

State Name: Pennsylvania    Enrollments In Special Education    Data Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Class | Special Schools | Day Special | Cooperative Special | Itinerant | |
| H-16 | Physically Handicapped | Preschool | | 104 | | | | |
| | | Elementary | | 522 | 1427 | | | |
| | | Secondary | | 417 | 1963 | | | |
| H-19 | Aphasic | Elementary | | | 5 | | | |
| H-21 | Educationally Retarded | Elementary | | | 700 | | | |
| | | Secondary | | | 523 | | | |
| | | | | | | | | NOT AVAILABLE |

State Name: Pennsylvania　　Personnel/Pupil Contact Ratio　　Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential Class | Special Schools | Day Special | Cooperative Special | Itinerant |
| H-1 | Blind | Teacher | All Grades | 1/5-1/10 | 1/5-1/10 | 1/5-1/10 | 1/5-1/10 | 1/20-1/25 |
| H-2 | Partially Sighted | Teacher | All Grades | 1/5-1/10 | 1/5-1/10 | 1/5-1/10 | 1/5-1/10 | 1/20-1/25 |
| H-4 | Deaf | Teacher | All Grades | | | 1/5-1/8 | 1/15-1/25 | 1/15-1/25 |
| H-5 | Hard of Hearing | Teacher | All Grades | | | 1/5-1/8 | 1/15-1/25 | 1/15-1/25 |
| H-7 | Emotionally Disturbed | Teacher | Elementary | | | 1/5-1/8 | 1/8-1/12 | |
| H-9 | EMR | Teacher | Elementary | | | | 1/10-1/18 | |
| | | | Secondary | | | 1/15-1/25 | 1/10-1/18 | |
| H-10 | TMR | Teacher | All Grades | 1/7-1/18 | 1/7-1/18 | 1/7-1/18 | 1/7-1/18 | 1/7-1/18 |
| H-12 | Speech Handicaps | Teacher | All Grades | | | | | 1/90-1/150 |
| H-15 | Brain Injured | Teacher | All Grades | 1/5-1/10 | 1/5-1/10 | 1/5-1/10 | 1/5-1/10 | 1/5-1/10 |
| H-19 | Asphasic | Teacher | All Grades | 1/5-1/12 | 1/5-1/12 | 1/5-1/12 | 1/5-1/12 | 1/5-1/12 |
| H-21 | Educationally Retarded | Teacher | All Grades | 1/10-1/15 | 1/10-1/15 | 1/10-1/15 | 1/10-1/15 | 1/10-1/15 |

Pennsylvania

State Name: Pennsylvania

Special Education Personnel Estimated Requirements/Employment Comparison[1]

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level: Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed |
| T/Blind | None | X | | | | 12 | | 7 | | | | | | 19 |
| | BA | X | | | | 42 | | 26 | | | | | | 68 |
| | MA | X | | | | 11 | | 6 | | | | | | 17 |
| | DOC | X | | | | 1 | | 0 | | | | | | 1 |
| | Uk | X | | | | 1 | | 2 | | | | | | 3 |
| | Total | | 6-12 | [3] | 57-113 | 66 | 49-99 | 41 | | | | | 112-224 | 107 |
| T/Partially Sighted | Uncertified | | | | | 2 | | 0 | | | | | | 2 |
| | None | | | | | 10 | | 4 | | | | | | 14 |
| | BA | X | | | | 33 | | 13 | | | | | | 46 |
| | MA | X | | | | 8 | | 4 | | | | | | 12 |
| | Total | | | | 44-56 | 53 | 13-17 | 21 | | | | | 57-73 | 74 |
| T/Deaf | None | | | | | 19 | | 11 | | | | | | 30 |
| | BA | X | | | | 66 | | 38 | | | | | | 104 |
| | MA | X | | | | 17 | | 10 | | | | | | 27 |
| | Uk | X | | | | 3 | | 1 | | | | | | 4 |
| | Total | | | | 38-62[2] | 105 | 15-23[2] | 60 | | | | | 53-85[2] | 165 |
| T/Hard of Hearing | Uncertified | | | | | 5 | | 0 | | | | | | 5 |
| | None | | | | | 67 | | 4 | | | | | | 71 |
| | BA | | | | | 233 | | 15 | | | | | | 248 |
| | MA | | | | | 59 | | 4 | | | | | | 63 |
| | Uk | | | | | 6 | | 1 | | | | | | 7 |

[1] Based upon enrollment data only (no waiting list data available)
[2] Calculation incomplete due to missing data (estimated requirements are not calculated by degree level)
[3] Employment data unavailable
Uk-Unknown

State Name: Pennsylvania　　Special Education Personnel Estimated Requirements/Employment Comparison 1/　　Data Period 1968-69

| Occupation<br>T=Teacher　A=Aide<br>Th=Therapist　O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed |
| T/Hard of Hearing (cont.) | Total |  |  |  | 14-24 2/ | 370 | 24-40 | 24 |  |  |  |  | 38-64 2/ | 394 |
| T/Socially and Emotionally Disturbed | Uncertified |  |  |  |  | 6 |  | 1 |  |  |  |  |  | 7 |
|  | None | X |  |  |  | 40 |  | 24 |  |  |  |  |  | 64 |
|  | BA | X |  |  |  | 140 |  | 93 |  |  |  |  |  | 233 |
|  | MA | X |  |  |  | 36 |  | 24 |  |  |  |  |  | 60 |
|  | Uk | X |  |  |  | 0 |  | 6 |  |  |  |  |  | 6 |
|  | Total |  | 4/ |  | 103-165 2/ | 222 | 4/ | 148 |  |  |  |  | 103-165 2/ | 370 |
| T/EMR | Uncertified |  |  |  |  | 18 |  | 20 |  |  |  |  |  | 38 |
|  | None | X |  |  |  | 253 |  | 226 |  |  |  |  |  | 479 |
|  | BA | X |  |  |  | 885 |  | 891 |  |  |  |  |  | 1776 |
|  | MA | X |  |  |  | 225 |  | 254 |  |  |  |  |  | 479 |
|  | Dr. | X |  |  |  | 1 |  | 0 |  |  |  |  |  | 1 |
|  | Uk | X |  |  |  | 22 |  | 23 |  |  |  |  |  | 45 |
|  | Total |  |  |  | 4/ | 1404 | 866-1444 2/ | 1414 |  |  |  |  | 866-1444 2/ | 2818 |
| T/TMR | Uncertified |  |  |  |  | 8 |  | 5 |  |  |  |  |  | 13 |
|  | None | X |  |  |  | 47 |  | 13 |  |  |  |  |  | 60 |
|  | BA | X |  |  |  | 163 |  | 85 |  |  |  |  |  | 248 |
|  | MA | X |  |  |  | 41 |  | 22 |  |  |  |  |  | 63 |
|  | Total |  |  |  | 174-447 | 259 | 92-236 | 125 |  |  |  |  | 266-683 | 384 |
| T/Speech Correction | None |  |  |  |  | 63 |  | 0 |  |  |  |  |  | 63 |
|  | BA |  |  |  |  | 220 |  | 6 |  |  |  |  |  | 226 |

1/ Based upon enrollment only (no waiting list data available)
2/ Calculation incomplete due to missing data (estimated requirements are not calculated by degree level)
4/ Calculation cannot be made due to missing data
Uk-Unknown

State Name: Pennsylvania

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Speech Correction (cont.) | MA | X |  |  |  | 56 |  | 4 |  |  |  |  |  | 60 |
|  | Uk | X |  |  |  | 10 |  | 0 |  |  |  |  |  | 10 |
|  | Total |  |  |  | 215-359 | 349 | 6-10 | 10 |  |  |  |  | 221-369 | 359 |
| T/Speech and Hearing | None |  |  |  |  | 45 |  | 0 |  |  |  |  |  | 45 |
|  | BA | X |  |  |  | 158 |  | 4 |  |  |  |  |  | 162 |
|  | MA | X |  |  |  | 40 |  | 0 |  |  |  |  |  | 40 |
|  | Uk | X |  |  |  | 7 |  | 0 |  |  |  |  |  | 7 |
|  | Total |  |  |  | 4/ | 250 | 4/ | 4 |  |  |  |  | 4/ | 254 |
| T/Brain Injured | None | X |  |  |  | 14 |  |  |  |  |  |  |  | 14 |
|  | BA | X |  |  |  | 50 |  |  |  |  |  |  |  | 50 |
|  | MA | X |  |  |  | 13 |  |  |  |  |  |  |  | 13 |
|  | Uk | X |  |  |  | 3 |  |  |  |  |  |  |  | 3 |
|  | Total |  |  |  | 165-331 | 80 |  |  |  |  |  |  | 165-331 | 80 |
| T/Physically Handicapped | Uncertified |  |  |  |  | 6 |  | 1 |  |  |  |  |  | 7 |
|  | None | X |  |  |  | 38 |  | 19 |  |  |  |  |  | 57 |
|  | BA | X |  |  |  | 133 |  | 66 |  |  |  |  |  | 199 |
|  | MA | X |  |  |  | 34 |  | 17 |  |  |  |  |  | 51 |
|  | Total |  |  |  |  | 211 |  | 103 |  |  |  |  | 4/ | 314 |
| T/Aphasic | BA |  |  |  | 1 | 1 |  |  |  |  |  |  | 1 | 1 |
| T/Educationally Retarded | None |  |  |  |  | 10 |  | 46 |  |  |  |  |  | 56 |
|  | BA |  |  |  |  | 34 |  | 160 |  |  |  |  |  | 194 |

1/ Based upon enrollment data only (no waiting list data available)
4/ Calculation cannot be made due to missing data
Uk-Unknown

State Name:Pennsylvania

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Educationally Retarded (cont.) | MA | | | | | 9 | | 41 | | | | | | 50 |
| | Uk | | | | | 1 | | 5 | | | | | | 6 |
| | Total | | | | 46-70 | 54 | 34-52 | 252 | | | | | 80-122 | 306 |
| Th/Physical | Uk | | | | 4/ | 40 | 4/ | 30 | | | | | 4/ | 70 |
| A/Brain Injured | Uk | | | | 4/ | 73 | | | | | | | 4/ | 73 |
| A/Physically Handicapped | Uk | | | | 4/ | 137 | 4/ | 99 | | | | | 4/ | 236 |

1/ Based upon enrollment data only (no waiting list data available)
4/ Calculation cannot be made due to missing data
Uk-Unknown

State Name: Rhode Island Overview of Special Education Programs Data Period 1968 - 1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Elementary | | Secondary | | | | | | | |
| | | Pre-school | Pri. | Inter. | Jr. H. | Sr. H. | Residential Special Class | Special Schools | Day Special Class | Resource Room | Itinerant | Special Class in Regular Sch. |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Handicapped | 3-5 pvt | 6-14 | | 15-21 | | | | X | X | X | X |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | 3-5 | 6-14 | | 15-21 | | X | X | | X | X | X |
| H-7 | Emotionally Handicapped | 3-5 pvt | 6-14 | | | | X | X | | X | X | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 3-5 | 6-9 | 10-13 | 14-16 | 16-21 | X | X | X | | X | X |
| H-10 | TMR | 3-5 | 6-9 | 10-13 | 14-16 | 16-21 | X | X | | | X | X |
| H-11 | MR (Custodial, Severe, Institutional) | under 5 | 5-9 | 10-14 | 15-17 | 18-19 | X | | | | | |
| H-12 | Speech Handicaps | 3-5 pvt | 6-14 | | 15-21 | | | | | | X | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | | | | | | | | | | |
| H-15 | Brain Injured 2/ | -5 pvt | 6-14 | | | | | X | | X | X | X |
| H-16 | Physically Handicapped | 3-5 pvt | 6-14 | | | | | X | | | X | X |
| H-17 | Homebound 3/ | 3-5 | 6-14 | | 15-21 | | | | | | X | |
| H-22 | Severe Emotionally Handicapped | ungraded | | | | | X | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state
2/ Includes Asphasic
3/ Includes Health Impaired

State Name: Rhode Island Enrollments In Special Education Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Special Schools | Special Class in Regular Room | Resource Room | Itinerant | |
| H-3 | Visually Handicapped | Preschool | | | 6 | | | NOT AVAILABLE |
| | | Elementary | | | 15 | 7 | 9 | |
| | | Secondary | | | 1 | | 22 | |
| H-6 | Hearing Handicapped | Preschool | | 23 | 7 | | 1 | |
| | | Elementary | 5 | 61 | 10 | 15 | 33 | |
| | | Secondary | | 37 | | 5 | 29 | |
| | | Unspecified | | | | 39 | 35 | |
| H-7 | Emotionally Disturbed | Preschool | | 28 | | | | |
| | | Elementary | | | 209 | 55 | | |
| H-9 | EMR | Preschool | 1 | | 40 | | | |
| | | Elementary | 18 | 125 | 969 | | | |
| | | Secondary | 8 | | 648 | | | |
| | | Ungraded | | | 146 | | | |
| H-10 | TMR | Preschool | 1 | 40 | | | | |
| | | Elementary | 2-8 | 27 | 161 | | | |
| | | Secondary | 19 | 158 | 114 | | | |
| | | Ungraded | | 16 | 173 | | | |
| H-11 | Mentally Retarded (Institutionalized) | Preschool | 1 | | | | | |
| | | Elementary | 95 | | | | | |
| | | Secondary | 105 | | | | | |
| H-12 | Speech Handicaps | Unspecified | | | | | 4759 | |
| H-15 | Brain Injured | Preschool | | | 3 | | | |

State Name: Rhode Island  Enrollments In Special Education  Data Period 1968 - 1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Special Schools | Special Class in Regular Room | Resource Room | Itinerant | |
| H-15 | Brain Injured | Elementary | | 49 | 334 | 45 | 22 | NOT AVAILABLE |
| H-16 | Physically Handicapped | Preschool | | 93* | | | | |
| | | Elementary | | 8 | 50 | | | |
| | | Secondary | | | 1 | | | |
| H-17 | Home Bound | Unspecified | | | | | 343 | |
| H-22 | Severe and Emotionally Handicapped | Elementary | 98* | | | | | |
| | | Secondary | 34* | | | | | |

*Private School

State Name: Rhode Island Personnel/Pupil Contact Ratio Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential Special Class | Special Schools | Special Class in Regular School | Resource Room | Itinerant |
| H-3 | Visually Handicapped | Teacher | Preschool | | | 1/10 | 1/10 | 1/8 |
| | | | Elementary | | | 1/10 | 1/10 | 1/8 |
| | | Aide | Preschool | | | 1/10 | 1/10 | |
| | | Consulting Specialist | Preschool | | | | | 1/200 |
| | | | Elementary | | | | | 1/200 |
| | | | Secondary | | | | | 1/200 |
| | | Peripatologist | Elementary | | | | | 1/25 |
| | | | Secondary | | | | | 1/25 |
| H-6 | Hearing Handicapped | Teacher | Preschool | 1/10 | 1/10 | | 1/10 | 1/10 |
| | | | Elementary | 1/10 | 1/10 | | 1/15 | 1/8 |
| | | | Secondary | 1/10 | 1/10 | | 1/15 | 1/8 |
| | | Speech and Hearing Therapist | Preschool | 1/10 | 1/10 | | 1/10 | 1/10 |
| | | | Elementary | 1/10 | 1/10 | | 1/15 | 1/8 |
| | | | Secondary | 1/10 | 1/10 | | 1/15 | 1/8 |
| H-7 | Emotionally Disturbed | Teacher | Preschool | | 1/10 | | | |
| | | | Elementary | | | 1/10 | 1/10 | |
| | | Aide | Preschool | | 1/10 | | | |
| H-9 | EMR | Teacher | Preschool | 1/10 | 1/10 | 1/10 | | |
| | | | Primary | 1/10 | 1/10 | 1/10 | | |
| | | | Intermediate | 1/14 | 1/14 | 1/14 | | |
| | | | Secondary | 1/16 | 1/16 | 1/16 | | |
| | | Aide | Preschool | 1/10 | 1/10 | 1/10 | | |

State Name: Rhode Island Personnel/Pupil Contact Ratio Data Period 1968 -1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residen tial Special Class | Special Schools | Special Class in Regular School | Resource Room | Itinerant |
| H-10 | TMR | Teacher | Preschool | 1/10 | 1/10 | 1/10 | | |
| | | | Elementary * | 1/12 | 1/12 | 1/12 | | |
| | | | Secondary | 1/12 | 1/12 | 1/12 | | |
| | | Aide | Preschool | 1/10 | 1/10 | 1/10 | | |
| | | | Elementary | 1/12 | 1/12 | 1/12 | | |
| | | | Secondary | 1/12 | 1/12 | 1/12 | | |
| H-11 | Mentally Retarded (Custodial, Severe, Institutionalized) | Teacher | Elementary | 1/10 | | | | |
| | | | Secondary | 1/10 | | | | |
| | | Child Development Teacher | Preschool | | 1/10 | | | |
| | | | Elementary | | 1/10 | | | |
| | | Aide | Preschool | | 1/10 | | | |
| | | | Elementary | | 1/10 | | | |
| | | | Secondary | | 1/10 | | | |
| | | Speech Therapist | Unspecified | | 1/40 | | | |
| | | Phys. Ed. Consultant | Unspecified | | 1/400 | | | |
| H-12 | Speech Handicaps | Speech & Hearing Therapist | Preschool | | | | | 1/70 |
| | | | Elementary | | | | | 1/70 |
| | | | Secondary | | | | | 1/70 |
| H-15 | Brain Injured | Teacher/Physically Handicapped | Preschool | | | 1/10 | 1/10 | |
| | | | Elementary | | | 1/10 | 1/10 | |
| | | | Secondary | | | 1/10 | 1/10 | |
| H-16 | Physically Handicapped | Teacher | Preschool | | 1/10 | | | |

* Ratio is based on teacher with aide

State Name: Rhode Island Personnel/Pupil Contact Ratio Data Period 1968 -1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential Special Class | Special Schools | Special Class in Regular School | Resource Room | Itinerant |
| H-16 | Physically Handicapped (cont.) | Teacher | Elementary | | | 1/10 | | |
| | | | Secondary | | | 1/10 | | |
| | | Aide | Elementary | | | 1/10 | | |
| | | | Secondary | | | 1/10 | | |
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State Name: Rhode Island

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968- 1969

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | | | | | | 1 | | | | | | | | 1 |
| | MA | X | | 1 | | 2 | | 3 | | | | | | 6 |
| | Total | | 1 | 1 | 3 | 3 | 2/ | 3 | | | | | 4 3/ | 7 |
| A/Visually Handicapped | | | | 24 | | | | | | | | | | 24 |
| | Total | | 1 3/ | 24 | | | | | | | | | 1 3/ | 24 |
| O/Consultant Visually Handicapped | MA | X | | | | | | | | | | 1 | | 1 |
| | Total | | | | | | | | | | 1 | 1 | 1 | 1 |
| O/Peripatologist | MA | X | | | | | | | | | | 1 | | 1 |
| | Total | | | | | | | | | | 1 | 1 | 1 | 1 |
| T/Hearing Handicapped | BA | X | | 1 | | | | 1 | | | | 11 | | 13 |
| | MA | X | | | | | | | | | | 9 | | 9 |
| | Total | | 2 3/ | 1 | 12 3/ | 4/ | 8 3/ | 1 | | | 2/ | 20 | 22 3/ | 22 |
| T/Emotionally Disturbed | BA | X | | 3 | | 11 | | | | | | | | 14 |
| | MA | X | | 1 | | 26 | | | | | | | | 27 |
| | Total | | 3 | 4 | 26 | 37 | | | | | | | 29 | 41 |
| T/Mentally Retarded | Uk | X | 8 3/ | 21 | 113 3/ | 54 | 72 3/ | 142 | | | | | 193 3/ | 217 |
| Th/Speech and Hearing | BA | X | | 2 | | 26 | | | | | | | | 28 |
| | MA | X | | 2 | | 27 | | | | | | | | 29 |
| | Uk | X | | | | | | | | | | 46 | | 46 |
| | Total | | 2 3/ | 4 | 12 3/ | 53 | 8 3/ | 4/ | | | 68 | 46 | 90 3/ | 103 |
| T/Physically Handicapped | Uk | | 9 3/ | 4/ | 43 3/ | 4/ | 2/ | | | | | | 52 3/ | 4/ |

1/ Based upon enrollment data only (no waiting list data available) Uk-Unknown.

2/ Calculations cannot be made due to missing data

3/ Calculations incomplete due to missing data

4/ Employment data unavailable

State Name: Rhode Island

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-1969

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| A/Physically Handicapped | Uk | | | | 5 | 4/ | | | | | | | 5 | 4/ |
| A/Mentally Retarded | Uk | | 8 | | 10 | 4/ | | | | | | | 18 | 4/ |
| A/Emotionally Disturbed | Uk | | 3 | 4/ | | | | | | | | | 3 | 4/ |
| | | | | | | | | | | | | | | |
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Uk-Unknown

State Name: South Carolina Overview of Special Education Programs Data Period 1968-69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Primary | Inter-mediate | Jr. High | Sr. High | Residential | Day Special School | Self-Contained Class | Resource Room | Itinerant | |
| H-1 | Blind | 1-5 | 6-8 | 9-12 | 13-15 | 16-18 | X | X | | X | | |
| H-2 | Partially Sighted | 1-5 | 6-8 | 9-12 | 13-15 | 16-18 | | | X | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 1-5 | 6-8 | 9-12 | 13-15 | 16-18 | X | X | X | | | |
| H-5 | Hard of Hearing | 1-5 | 6-8 | 9-12 | 13-15 | 16-18 | | | X | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally | 1-5 | 6-8 | 9-12 | 13-15 | 16-18 | X | X | X | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 1-5 | 6-8 | 9-12 | 13-15 | 16-18 | | | | | | |
| H-10 | TMR | 1-5 | 6-8 | 9-12 | 13-15 | 16-18 | | X | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | X | X | | | |
| H-12 | Speech Handicaps | 1-5 | 6-8 | 9-12 | 13-15 | 16-18 | | | | | X | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | 1-5 | 6-8 | 9-12 | 13-15 | 16-18 | X | | X | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped 2/ | 1-5 | 6-8 | 9-12 | 13-15 | 16-18 | | | | | | |
| H-17 | Homebound | | | | | | | | X | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state
2/ Called Orthopedically Handicapped

State Name: South Carolina　　Enrollments In Special Education　　Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Day Special School | Self-Contained Class | Resource Room | Itinerant | |
| H-1 | Blind | Elementary | 62 | 3 | | 3 | | Not Available |
| | | Secondary | 105 | 4 | | 4 | | |
| H-2 | Partially Sighted | Elementary | | | 7 | | | |
| H-4 | Deaf | Preschool | | 40 | 30 | | | |
| | | Elementary | 193 | | | | | |
| | | Secondary | 117 | | | | | |
| H-5 | Hard of Hearing | Elementary | | | 110 | | | |
| H-7 | Emotionally Handicapped | Elementary | 30 | 10 | 300 | | | |
| | | Secondary | 10 | | 40 | | | |
| H-9 | EMR | Preschool | | 30 | | | | |
| | | Elementary | | | 8925 | | | |
| | | Secondary | | | 2480 | | | |
| H-10 | TMR | Preschool | | 50 | | | | |
| | | Elementary | | | 500 | | | |
| | | Secondary | | | 140 | | | |
| H-12 | Speech Handicaps | Elementary | | | | | 8040 | |
| | | Secondary | | | | | 5360 | |
| H-14 | Special Learning Disabilities | Elementary | 15 | | 102 | | | |
| | | Secondary | 2 | | 68 | | | |
| H-16 | Orthopedically Handicapped | Elementary | | | 105 | | | |
| | | Secondary | | | 100 | | | |

State Name: South Carolina Personnel/Pupil Contact Ratio Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | All Programs | Itinerant | | | |
| H-1 | Blind | Teacher | All Grades | 1/10 | | | | |
| H-2 | Partially Sighted | Teacher | All Grades | 1/10 | | | | |
| H-4 | Deaf | Teacher | All Grades | 1/8 | | | | |
| H-5 | Hard of Hearing | Teacher | All Grades | 1/8 | | | | |
| H-7 | Emotionally Handicapped | Teacher | All Grades | 1/8 | | | | |
| H-10 | TMR | Teacher | All Grades | 1/8 | | | | |
| H-12 | Speech Handicaps | Teacher | All Grades | | 1/75 | | | |
| H-16 | Orthopedically Handicapped | Teacher | All Grades | 1/8 | | | | |

State Name: South Carolina　　Special Education Personnel Estimated Requirements/Employment Comparison 1/　　Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | BA | X | | | | 14 | | 9 | | | | | | 23 |
| | MA | X | | | | 2 | | | | | | | | 2 |
| | Total | | | | 8 | 16 | 11 | 9 | | | | | 19 | 25 |
| T/Hearing Handicapped | BA | X | | 5 | | 34 | | 24 | | | | | | 63 |
| | MA | X | | 1 | | | | | | | | | | 1 |
| | Total | | 9 | 6 | 38 | 34 | 14 | 24 | | | | | 61 | 64 |
| T/Emotionally Handicapped | Uncer | | | 24 | | 4 | | | | | | | | 28 |
| | BA | X | | | | 18 | | 12 | | | | | | 30 |
| | Total | | 3/ | 24 | 42 | 22 | 6 | 12 | | | | | 48 2/ | 58 |
| T/EMR | Uncer | | | | | 120 | | 80 | | | | | | 200 |
| | BA | X | | | | 440 | | 110 | | | | | | 550 |
| | MA | X | | | | 40 | | 27 | | | | | | 67 |
| | Total | | | | 3/ | 600 | 3/ | 217 | | | | | 3/ | 817 |
| T/TMR | Uncer | | | | | 40 | | 10 | | | | | | 50 |
| | BA | X | | | | 54 | | 10 | | | | | | 64 |
| | Total | | 6 | 4/ | 62 | 94 | 17 | 20 | | | | | 85 | 114 |
| T/Speech Handicapped | Uncer | | | | | 24 | | 10 | | | | | | 34 |
| | BA | X | | | | 75 | | 15 | | | | | | 90 |
| | MA | X | | | | 8 | | 2 | | | | | | 10 |
| | Total | | | | 107 | 87 | 71 | 27 | | | | | 178 | 114 |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations incomplete due to missing data
3/ Calculations cannot be made due to missing data
4/ Employment data unavailable

State Name: South Carolina

Special Education Personnel Estimated Requirements/Employment Comparison[1]

Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Special Learning Disabilities | Uncer. | | | | | 17 | | | | | | | | 17 |
| | Total | | | | 3/ | 17 | | | | | | | 3/ | |
| T/Orthopedically Handicapped | Uncer. | | | | | 9 | | 1 | | | | | | 10 |
| | BA | X | | | | 14 | | 1 | | | | | | 15 |
| | Total | | | | 15 | 23 | 10 | 2 | | | | | 25 | 25 |

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[1] Based upon enrollment data only (no waiting list data available)

[3] Calculations incomplete due to missing data

State Name: South Dakota     Overview of Special Education Programs     Data Period 1968 -1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Elementary | Secondary | Ungraded | | | Residential School | Special School | Day Special Class | Itinerant | | |
| H-1 | Blind | 6-13 | 14-17 | | | | X | | | X | | |
| H-2 | Partially Sighted | 6-13 | 14-17 | | | | X | | | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 6-13 | 14-17 | | | | X | | | X | | |
| H-5 | Hard of Hearing | 6-13 | 14-17 | | | | X | | | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally | 7-13 | 14-21 | 12-18 | | | X | | X | X | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 7-13 | 14-21 | | | | | | X | X | | |
| H-10 | TMR | 7-13 | 14-21 | 5-21 | | | X | X | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | 7-21 | | | | | | X | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | 7-13 | | | | | X | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | | 7-21 | | | X | | | X | | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Age Breakdowns are approximations

1/ If no entry is shown, category is not applicable to the state

South Dakota

State Name: South Dakota  Enrollments In Special Education  Data Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List* |
|---|---|---|---|---|---|---|---|---|
| | | | Residential School | Special School | Day Special Class | Itinerant | | |
| H-1 | Blind | Elementary | 7 | | | 0 | | 14 |
| | | Secondary | 3 | | | 1 | | |
| H-2 | Partially Sighted | Elementary | 27 | | | | | 14 |
| | | Secondary | 13 | | | | | |
| H-4 | Deaf | Elementary | 47 | | | 1 | | |
| | | Secondary | 19 | | | 0 | | |
| H-5 | Hard of Hearing | Elementary | 46 | | | | | 28 |
| | | Secondary | 19 | | | | | 28 |
| H-7 | Emotionally Disturbed | Elementary | | | 8 | | | 112 |
| | | Secondary | | | | | | 168 |
| | | Ungraded | 45 | | | 14 | | |
| H-9 | EMR | Elementary | | | 580 | | | 210 |
| | | Secondary | | | 290 | | | 252 |
| | | Ungraded | | | | 23 | | |
| H-10 | TMR | Elementary | 6 | 34 | 120 | | | 84 |
| | | Secondary | 66 | 11 | 51 | | | 14 |
| | | Ungraded | 220 | | | | | |
| H-12 | Speech Handicaps | Ungraded | | | | 1800 | | 210 |
| H-14 | Special Learning Disabilities | Elementary | 34 | | | | | 280 |
| | | Secondary | 0 | | | | | 280 |
| H-16 | Physically Handicapped | Elementary | 100 | | | | | 14 |
| | | Secondary | 31 | | | | | 28 |
| | | Ungraded | | | | 82 | | |

* Based on sample — rough estimates — no hard data

State Name: South Dakota Personnel/Pupil Contact Ratio Data Period 1968- 1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential School | Special School | Day Special School | Itinerant | |
| H-1 | Blind | Teacher | Secondary | | | | 1/5 day | |
| H-3 | Visually Handicapped | Teacher | All Grades | None | | | | |
| H-4 | Deaf | Teacher | Elementary | | | | 1/5 day | |
| H-6 | Hearing Handicapped | Teacher | All Grades | None | | | | |
| H-7 | Emotionally Disturbed | Teacher | Elementary | | | 1/8 | | |
| | | | All Grades | None | | | 1/5 day | |
| H-9 | EMR | Teacher | Elementary | | | 1/5-12[1] | 1/5 day | |
| | | | Secondary | | | 1/5-12[1] | 1/5 day | |
| | | Aide | Elementary | | | 1/12-20 | | |
| | | | Secondary | | | 1/12-20[2] | | |
| H-10 | TMR | Teacher | Elementary | 1/5-10 | 1/5-10 | 1/5-10[2] | | |
| | | | Secondary | 1/5-10 | 1/5-10 | 1/5-10[2] | | |
| | | Aide | Elementary | 1/10-15 | 1/10-15 | 1/10-15 | | |
| | | | Secondary | 1/10-15 | 1/10-15 | 1/10-1 | | |
| | | Teacher | All Grades | None | | | | |
| H-12 | Speech Handicaps | Therapist | All Grades | | | | 1/100 caseload | |
| H-14 | Special Learning Disabilities | Teacher | Elementary | 1/5-10[3] | | | | |
| | | Aide | Elementary | 1/10-20 | | | | |
| H-16 | Physically Handicapped | Teacher | Elementary | 1/5-12[1] | | Probably | 1/5 day | |
| | | | Secondary | 1/5-12[1] | | Ungraded | 1/5 day | |
| | | Aide | Elementary | 1/12-20 | | | | |
| | | | Secondary | 1/12-20 | | | | |

[1] 1/12-20 with aide [2] 1/10-15 with aide [3] 1/10-20 with aide

State Name: South Dakota　Personnel/Pupil Contact Ratio　Data Period 1968-1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential School | Special School | Day Special School | Itinerant | |
| H-9 | EMR | Tutors | All Grades | | | | 1/1 | |
| H-7 | Emotionally Disturbed | Tutors | All Grades | | | | 1/1 | |
| H-16 | Physically Handicapped | Tutors | All Grades | | | | 1/1 | |
| | | Therapist/Physical | All Grades | | | | 1/100 case load | |
| H-9 | EMR | Voc Adjust Coord | Secondary | | | | 1/50 case load | |

State Name: South Dakota

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level<br>Preschool<br>Estimated | <br><br>Employed | <br>Elementary<br>Estimated | <br><br>Employed | <br>Secondary<br>Estimated | <br><br>Employed | <br>Ungraded<br>Estimated | <br><br>Employed | <br>Unspecified<br>Estimated | <br><br>Employed | <br>Total<br>Estimated | <br><br>Employed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T/Visually Handicapped | None | | | | | | | | | 2 | | | | 2 |
| | BA | | | | | | | 1 | | 7 | | | | 8 |
| | MA | | | | | | | | | 2 | | | | 2 |
| | Total | | | | | | 2/ | 1 | 2/ | 11 | | | 2/ | 12 |
| T/Hearing Handicapped | None | X | | | | | | | | 7 | | | | 7 |
| | BA | X | | | | 1 | | | | 12 | | | | 13 |
| | MA | X | | | | | | | | 1 | | | | 1 |
| | Total | | | | 2/ | 1 | | | 2/ | 20 | | | 2/ | 21 |
| T/Emotionally Disturbed | None | X | | | | | | | | 1 | | | | 1 |
| | BA | X | | | | 1 | | | | 4 | | | | 5 |
| | Total | | | | 1 | 1 | | | 3 3/ | 5 | | | 4 3/ | 6 |
| T/EMR | Uncertified | | | | | 12 | | 5 | | | | | | 17 |
| | None | X | | | | 14 | | 2 | | | | | | 16 |
| | BA | X | | | | 32 | | 12 | | | | | | 44 |
| | MA | X | | | | 2 | | 4 | | | | | | 6 |
| | Total | | | | 48-116 | 60 | 24-58 | 23 | 4 | 4/ | | | 76-178 | 83 |
| T/TMR | Uncertified | | | | | 4 | | 1 | | | | | | 5 |
| | None | X | | | | 6 | | 1 | | 2 | | | | 9 |
| | BA | X | | | | 9 | | 2 | | 8 | | | | 19 |
| | Total | | | | 14-28 | 19 | 12-25 | 4 | 2/ | 10 | | | 26-53 3/ | 33 |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations cannot be made due to missing data
3/ Calculations incomplete due to missing data
4/ Employment data unavailable

State Name: South Dakota Special Education Personnel Estimated Requirements/Employment Comparison [1] Data Period 1968 -69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed | Estimated | Employed |
| Th/Speech | BA | X |  |  |  |  |  |  |  | 16 |  |  |  | 16 |
|  | MA | X |  |  |  |  |  |  |  | 1 |  |  |  | 1 |
|  | Total |  |  |  |  |  |  |  | 18 | 17 |  |  | 18 | 17 |
| T/Special Learning Disabilities | BA | X |  |  |  | 2 |  |  |  |  |  |  |  | 2 |
|  | MA | X |  |  |  | 1 |  |  |  |  |  |  |  | 1 |
|  | Total |  |  |  | 3-6 | 3 |  |  |  |  |  |  | 3-6 | 3 |
| A/Special Learning Disabilities | Uncertified |  |  |  | 1-3 | 2 |  |  |  |  |  |  | 1-3 | 2 |
| T/Physically Handicapped | BA | X |  |  |  | 8 |  |  |  | 3 |  |  |  | 11 |
|  | Total |  |  |  | 8-20 | 8 | 3-6 | [4] | 16 | 3 |  |  | 27-42 | 11 |
| O/EMR Tutors | Uk |  |  |  |  |  |  |  | 23 | 20 |  |  | 23 | 20 |
| O/Emotionally Disturbed Tutors | Uk |  |  |  |  |  |  |  | 14 | 8 |  |  | 14 | 8 |
| O/Physically Handicapped Tutors | Uk |  |  |  |  |  |  |  | 82 | 26 |  |  | 82 | 26 |
| Th/Physical | BA | X |  |  |  |  |  |  |  | 3 |  |  |  | 3 |
|  | Total |  |  |  |  |  |  |  | 1 | 3 |  |  | 1 | 3 |
| Th/Occupational | BA | X |  |  |  |  |  |  |  | 3 |  |  |  | 3 |
|  | Total |  |  |  |  |  |  |  | 1 | 3 |  |  | 1 | 3 |
| O/EMR Vocational Adjustment Coordinator | BA |  |  |  |  |  |  | 1 |  |  |  |  |  | 1 |
|  | MA |  |  |  |  |  |  | 1 |  |  |  |  |  | 1 |
|  | Total |  |  |  |  |  | [2] | 2 | 1 | [4] |  |  | 1 [3] | 2 |
| O/Psychologist | MA | X |  |  |  |  |  |  | [2] | 4 |  |  | [2] | 4 |
| O/Psychological Examiners | MA | X |  |  |  |  |  |  | [2] | 62 |  |  | [2] | 62 |

[1] Based upon enrollment data only (no waiting list data available)
[2] Calculations cannot be made due to missing data
[3] Calculations incomplete due to missing data
[4] Employment data unavailable

State Name: Tennessee Overview of Special Education Programs Data Period 1968-69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Ungraded | | | | Day Special Class | Itinerant | | | | |
| H-1 | Blind | | 5-21 | | | | X | | | | | |
| H-2 | Partially Sighted | | 5-21 | | | | X | | | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 3-6 | 5-21 | | | | X | | | | | |
| H-5 | Hard of Hearing | | 5-21 | | | | X | | | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally | | 5-21 | | | | X | | | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 5-21 | | | | X | | | | | |
| H-10 | TMR | | 5-21 | | | | X | | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | 5-21 | | | | X | X | | | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities 2/ | | 5-21 | | | | X | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | | | | | | | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| H-18 | Multiple Handicapped | | | | | | X | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state
2/ Perceptually Handicapped

State Name: Tennessee — Enrollments In Special Education — Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Day Special Class | Itinerant | | | | |
| H-3 | Visually Handicapped | Ungraded | 266 | | | | | Not Available |
| H-6 | Hearing Handicapped | Ungraded | 301 | | | | | |
| H-7 | Emotionally Disturbed | Ungraded | 108 | | | | | |
| H-9 | EMR | Ungraded | 11342 | | | | | |
| H-10 | TMR | Ungraded | 1842 | | | | | |
| H-12 | Speech Handicaps | Ungraded | 62 | 16026 | | | | |
| H-14 | Special Learning Disabilities | Ungraded | 692 | | | | | |
| H-18 | Multiple Handicapped | Ungraded | 910 | | | | | |

State Name: Tennessee Personnel/Pupil Contact Ratio Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Day Special Class | Itinerant | | | |
| H-1 | Blind | Teacher | Ungraded | 1/8 | | | | |
| H-2 | Partially Sighted | Teacher | Ungraded | 1/10 | | | | |
| H-4 | Deaf | Teacher | Ungraded | 1/8 | | | | |
| H-5 | Hard of Hearing | Teacher | Ungraded | 1/10 | | | | |
| H-7 | Emotionally Disturbed | Teacher | Ungraded | 1/6 | | | | |
| H-9 | EMR | Teacher | Ungraded | 1/10 | | | | |
| H-10 | TMR | Teacher | Ungraded | 1/8 | | | | |
| H-12 | Speech Handicaps | Teacher | Ungraded | 1/25 | 1/70 | | | |
| H-14 | Special Learning Disabilities | Teacher | Ungraded | 1/10 | | | | |
| H-18 | Multiple Handicapped | Teacher | Ungraded | 1/8 | | | | |

State Name: Tennessee

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | Uncer. | | | | | | | | | 11 | | | | 11 |
| | BA | X | | | | | | | | 3 | | | | 3 |
| | MA | X | | | | | | | | 8 | | | | 8 |
| | Total | | | | | | | | 27-33 | 22 | | | 27-33 | 22 |
| T/Hearing Handicapped | Uncer. | | | | | | | | | 11 | | | | 11 |
| | BA | X | | | | | | | | 7 | | | | 7 |
| | MA | X | | | | | | | | 4 | | | | 4 |
| | Total | | | | | | | | 30-38 | 22 | | | 30-38 | 22 |
| T/Emotionally Disturbed | Uk | | | | | | | | 18 | 18 | | | 18 | 18 |
| T/EMR | Uncer. | | | | | | | | | 400 | | | | 400 |
| | Uk | X | | | | | | | | 350 | | | | 350 |
| | Total | | | | | | | | 1134 | 750 | | | 1134 | 750 |
| T/TMR | Uk | | | | | | | | 230 | 130 | | | 230 | 130 |
| Th/Speech and Hearing | Uncer. | | | | | | | | | 3 | | | | 3 |
| | Uk | X | | | | | | | | 177 | | | | 177 |
| | Total | | | | | | | | 230 | 180 | | | 230 | 180 |
| T/Special Learning Disabilities | Uk | | | | | | | | 69 | 63 | | | 69 | 63 |
| T/Multiple Handicapped | Uncer. | | | | | | | | | 19 | | | | 19 |
| | Uk | X | | | | | | | | 58 | | | | 58 |
| | Total | | | | | | | | 114 | 77 | | | 114 | 77 |

1/ Based upon enrollment data only (no waiting list data available)

UK - Unknown

State Name: Texas          Overview of Special Education Programs          Data Period 1969-1970

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | Unspecified | | Residential | Special School | Day Special Class | Cooperative Class | Resource Room | Itinerant |
| H-1 | Blind | | 6-12 | 13-21 | | | X | | X | X | X | X |
| H-2 | Partially Sighted | | 6-12 | 13-21 | | | | | X | X | X | X |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 3-5 | 6-12 | 13-21 | | | X | X | X | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally Disturbed | | 6-12 | 13-21 | | | X | | X | X | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | | | 6-21 | | X | | X | | | |
| H-10 | TMR | | | | 6-21 | | X | | X | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | | | | | | | | |
| H-13 | Speech and Hearing | | 6-12 | 13-21 | | | | | | | | X |
| H-14 | Special Learning Disabilities | | | | | | | | | | | |
| H-15 | Brain Injured | | 6-12 | 13-21 | | | | | X | X | X | |
| H-16 | Physically Handicapped | | 6-12 | 13-21 | | | X | | X | | | X |
| H-17 | Homebound | | | | 6-21 | | | | | | | X |
| H-18 | Hospital | | | | 6-21 | | | | | | | X |
| H-19 | Combination | | | | 6-21 | | | | X | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state

Texas

State Name: Texas Enrollments In Special Education Date Period 69 - 70

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type: Residential School | Special School | Day Special Class | Itinerant | Unknown | Estimate Unserved Pop. based on prevalence rates | Waiting List |
|---|---|---|---|---|---|---|---|---|---|
| H1 | Blind | All Grades | 250 | | | | 141 | 230 | 85 |
| H-2 | Partially Sighted | All Grades | | | | | 87 | 4,920 | |
| H-4 | Deaf & Severely Hard of Hearing | Preschool | 152 | | 396 | | | | Data |
| | | All Grades | 503 | 864 | 359 | | | 1,600 | for |
| H-7 | Emotionally Disturbed | All Grades | 409 | | 220 | | | 51,650 | |
| H-9 | EMR | All Grades | 787 | | 38206 | | | 23,400 | Other |
| H-10 | TMR | All Grades | 762 | | 4705 | | | 4,750 | Than |
| H-13 | Speech and Hearing | All Grades | | | | 83,882 | | 64,500 | Texas |
| H-15 | Minimal Brain Injured | All Grades | | | 7860 | | | 48,700 | School |
| H-16 | Physically Handicapped | All Grades | | | 1010 | | | 23,250 | for the |
| H-17 | Homebound | All Grades | | | | 1,487 | | | Blind |
| H-18 | Hospital | All Grades | | | | 557 | | | is |
| H-19 | Combination | All Grades | | | 907 | | | | unavailable |

State Name: Texas

Personnel/Pupil Contact Ratio

Data Period 1969 -1970

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential School | Special School | Day Special Class | Itinerant | |
| H-1 | Blind | Teacher | All Grades | 1/7 | | 1/8 | | |
| H-2 | Partially Sighted | Teacher | All Grades | | | 1/8 | | |
| H-4 | Deaf | Teacher | Preschool | 1/6 | | 1/6 | | |
| | | | All Grades | 1/9 | 1/8 | 1/8 | | |
| H-7 | Emotionally Disturbed | Teacher | All Grades | 1/6 | | 1/7 | | |
| H-9 | EMR | Teacher | All Grades | | | 1/8 | | |
| H-10 | TMR | Teacher | All Grades | | | 1/8 | | |
| H-13 | Speech and Hearing | Therapist | All Grades | | | | 1/60 | |
| H-15 | Brain Injured | Teacher | All Grades | | 1/8 | | | |
| H-16 | Physically Handicapped | Teacher | All Grades | 1/8 | | 1/8 | | |

State Name: Texas

Special Education Personnel Estimated Requirements/Employment Comparison [1]

Data Period 1969-1970

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level<br>Preschool<br>Esti-mated | <br><br>Employed | <br>Elementary<br>Esti-mated | <br><br>Employed | <br>Secondary<br>Esti-mated | <br><br>Employed | <br>Ungraded<br>Esti-mated | <br><br>Employed | <br>Unspecified<br>Esti-mated | <br><br>Employed | <br>Total<br>Esti-mated | <br><br>Employed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T/ Blind | Uk | X | | | 2/ | 11 | 2/ | 11 | 2/ | 8 | 48 | 17 | 48 | 47 |
| T/Partially Sighted | Uk | X | | | | | | | | | 2/ | 9 | 2/ | 9 |
| T/ Deaf | Uk | X | 2/ | 70 | 2/ | 24 | 2/ | 27 | 2/ | | 208 | 153 | 208 | 274 |
| T/Emotionally Disturbed | Uk | X | | | | | | | | | 99 | 20 3/ | 99 | 20 3/ |
| T/Mentally Retarded | Uk | X | | | | | | | | | 5364 | 3349 | 5364 | 3349 |
| Th/Speech | Uk | X | | | | | | | | | 1398 | 886 | 1398 | 886 |
| T/Brain Injured | Uk | X | | | | | | | | | | 785 | 2/ | 785 |
| T/Physically Handicapped | Uk | X | | | | | | | | | | 91 | 2/ | 91 |
| T/Combined Handicapped | Uk | X | | | | | | | | | | 80 | 2/ | 80 |
| T/Regular Handicapped | Uk | X | | | | | | | | | | 188 | 2/ | 188 |
| T/Regular Hospital | Uk | X | | | | | | | | | | 44 | 2/ | 44 |

1/ Based upon enrollment data only (no waiting list data available)

Uk - Unknown

2/ Calculation cannot be made due to missing data

3/ Employment data incomplete

State Name: Utah    Overview of Special Education Programs    Data Period 1968-69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | | Secondary | | Residential Special Class | Special Schools | Day Special Class | Cooperative Special Class | Itinerant | Special Class in Regular School |
| | | | Primary | Inter-mediate | Jr. High | High | | | | | | |
| H-1 | Blind | | 6-8 | 9-11 | 12-14 | 15-22 | X | | | | X | |
| H-2 | Partially Sighted | | 6-8 | 9-11 | 12-14 | 15-22 | | | | | X | |
| H-3 | Visually Handicapped | | | | | | X | | | | | X |
| H-4 | Deaf | 3-5 | 6-8 | 9-11 | 12-14 | 15-22 | | | | | | |
| H-5 | Hard of Hearing | | 6-8 | 9-11 | 12-14 | 15-22 | | | | | X | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally | | 6-8 | 9-11 | 12-14 | 15-22 | X | | X | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | 6-8 | 9-11 | 12-14 | 15-22 | | | X | | | |
| H-10 | TMR | | 6-8 | 9-11 | 12-14 | 15-22 | | | | | | X |
| H-11 | MR (Custodial, Severe, Institutional) | | 6-8 | 9-11 | 12-14 | 15-22 | | X | | | | |
| H-12 | Speech Handicaps | | | | | | | | | | | |
| H-13 | Speech and Hearing | | 6-8 | 9-11 | 12-14 | 15-22 | | | | | X | |
| H-14 | Special Learning Disabilities 2/ | | 6-8 | 9-11 | 12-14 | 15-22 | | | | X | | |
| H-15 | Brain Injured | | 6-8 | 9-11 | 12-14 | 15-22 | | | | | | |
| H-16 | Physically Handicapped 3/ | | 6-8 | 9-11 | 12-14 | 15-22 | | | | | X | |
| H-17 | Homebound | | 6-8 | 9-11 | 12-14 | 15-22 | | | | | X | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state
2/ Remedial Program
3/ Motor Handicaps

State Name: Utah        Enrollments In Special Education        Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Special Class in Regular School |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Special Schools | Day Special Class | Cooperative Special Class | Itinerant | |
| H-1 | Blind | Preschool | 21 | | | | | |
| | | Elementary | 38 | | | | 13 | |
| | | Secondary | 27 | | | | 16 | |
| | | Ungraded | 8 | | | | | |
| H-2 | Partially Sighted | Elementary | | | | | 41 | |
| | | Secondary | | | | | 27 | |
| H-4 | Deaf | Preschool | 18 | | | | | 44 |
| | | Elementary | 69 | | | | | 58 |
| | | Secondary | 70 | | | | | 12 |
| H-5 | Hard of Hearing | Elementary | | | | | 176 | |
| | | Secondary | | | | | 63 | |
| H-7 | Emotionally Disturbed | Elementary | 11 | | 726 | | | |
| | | Secondary | 43 | | 604 | | | |
| H-9 | EMR | Elementary | | | 1505 | | | |
| | | Secondary | | | 1433 | | | |
| H-10 | TMR | Elementary | | | | | | 165 |
| | | Secondary | | | | | | 118 |
| H-11 | MR (Institutionalized) | Preschool | | 518 | | | | |
| H-13 | Speech and Hearing | Elementary | | | | | 7767 | |
| | | Secondary | | | | | 703 | |
| H-14 | Special Learning Disabilities | Elementary | | | | 6547 | | |
| | | Secondary | | | | 2734 | | |
| | No waiting list data available | | | | | | | |

State Name: Utah　　Enrollments In Special Education　　Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Special Class in Regular School |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Special Schools | Day Special Class | Cooperative Special Class | Itinerant | |
| H-16 | Physically Handicapped | Elementary | | | | | | 90 |
| | | Secondary | | | | | | 53 |
| H-17 | Homebound | Elementary | | | | | 273 | |

No waiting list data available

State Name: Utah

Personnel/Pupil Contact Ratio

Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Residential Special Class | Special Schools | Day Special Class | Cooperative Special Class | Itinerant | Special Classes in Regular School |
| H-1 | Blind | Teacher | Elementary | 1/8 | | | 1/15 | | |
| | | | Secondary | 1/8 | | | 1/15 | | |
| H-2 | Partially Sighted | Teacher | Elementary | | | | 1/15 | | |
| | | | Secondary | | | | 1/15 | | |
| H-4 | Deaf | Teacher | Elementary | | 1/8 | | | | 1/8 |
| | | | Secondary | | 1/8 | | | | 1/8 |
| H-5 | Hard of Hearing | Teacher | Elementary | | | | | 1/15 | |
| | | | Secondary | | | | | 1/15 | |
| H-7 | Emotionally Handicapped | Teacher | Elementary | 1/6 | | 1/10 | | | |
| | | | Secondary | | | 1/10 | | | |
| H-9 | EMR | Teacher | Elementary | | | 1/15 | | | |
| | | | Secondary | | | 1/15 | | | |
| H-10 | TMR | Teacher | Elementary | | | | | | 1/12 |
| | | | Secondary | | | | | | 1/12 |
| H-11 | Severe Mentally Retarded | Teacher | Ungraded | | 1/20 1/ | | | | |
| | | Aide | Ungraded | | 1/7 2/ | | | | |
| H-13 | Speech and Hearing | Correctionist | Elementary | | | | | 1/65 | |
| | | | Secondary | | | | | 1/65 | |
| H-14 | Special Learn. Disability | Remedial Teacher | All Grades | | | | 1/24 | | |
| H-16 | Physically Handicapped | Teacher | Elementary | | | | | | 1/12 |
| | | | Secondary | | | | | | 1/12 |
| H-17 | Homebound | Teacher | All Grades | | | | | 1/10 | |

1/ With 3 aides
2/ With teachers

State Name: Utah

Special Education Personnel Estimated Requirements/Employment Comparison[1]

Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | BA | X | | | | 9 | | 4 | | | | 2 | | 15 |
| | MA | X | | 1 | | 1 | | 1 | | 1 | | 1 | | 5 |
| | Total | | [2] | 1 | 5[3] | 10 | 4[3] | 5 | [2] | 1 | [2] | 3 | 9[3] | 58 |
| T/Deaf | Uncer. | | | 5 | | 5 | | 2 | | | | | | 12 |
| | BA | X | | 2 | | 14 | | 8 | | | | | | 24 |
| | MA | X | | 3 | | 7 | | 9 | | 2 | | 2 | | 23 |
| | Total | | [2] | 10 | 7[3] | 26 | 2[3] | 19 | [2] | 2 | [2] | 2 | 9[3] | 58 |
| T/Hard of Hearing | BA | X | | | | 2 | | | | | | | | 2 |
| | MA | X | | | | 1 | | 1 | | 1 | | | | 3 |
| | Total | | | | 11 | 3 | 4 | 1 | [2] | 1 | | | 15 | 5 |
| T/Emotionally Disturbed | None | X | | | | 1 | | | | 1 | | | | 2 |
| | BA | X | | | | 19 | | 11 | | 1 | | | | 31 |
| | MA | X | | | | 5 | | 2 | | 1 | | | | 9 |
| | Total | | 2 | [4] | 72 | 26 | 60 | 13 | [2] | 3 | | | 134 | 42 |
| T/EMR | None | X | | | | 4 | | 1 | | 1 | | | | 6 |
| | BA | X | | | | 66 | | 65 | | 26 | | 1 | | 158 |
| | MA | X | | 2 | | 8 | | 11 | | 3 | | | | 24 |
| | DR | X | | | | 1 | | 1 | | | | | | 2 |
| | Total | | [2] | 2 | 100 | 79 | 95 | 78 | [2] | 30 | [2] | 1 | 195 | 190 |

[1] Based upon enrollment data only (no waiting list data available)
[2] Calculations cannot be made due to missing data
[3] Calculations incomplete due to missing data
[4] Employment data not available

State Name: Utah

Special Education Personnel Estimated Requirements/Employment Comparison1/

Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/TMR | BA | X | | | | 9 | | 3 | | 4 | | | | 16 |
| | MA | X | | | | 2 | | | | | | 1 | | 3 |
| | Total | | | | 13 | 11 | 10 | 3 | 2/ | 4 | 2/ | 1 | 23 | 19 |
| T/Severe MR (with 3 aides) | Uk | | | | | | | | 25 | 4/ | | | 25 | 4/ |
| O/Speech and Hearing Correctionist | BA | X | | | | 12 | | 1 | | 1 | | 65 | | 79 |
| | MA | X | | | | 3 | | | | | | 18 | | 21 |
| | DR | X | | | | | | | | | | 2 | | 2 |
| | Total | | | | 119 | 15 | 10 | 1 | 2/ | 1 | 2/ | 85 | 129 | 102 |
| T/Remedial Teachers for Learning Disabilities | None | | | | | 3 | | 2 | | 2 | | | | 7 |
| | BA | | | 3 | | 104 | | 83 | | 55 | | 1 | | 241 |
| | MA | | | | | 23 | | 17 | | 19 | | 2 | | 61 |
| | Total | | 2/ | 3 | 272 | 130 | 113 | 102 | 2/ | 76 | 2/ | 3 | 385 | 314 |
| T/Physically Handicapped | BA | | | | | 5 | | 2 | | | | | | 7 |
| | MA | | | | | | | | | 1 | | | | 1 |
| | Total | | | | 8 | 5 | 4 | 2 | 2/ | 1 | | | 12 | 8 |
| T/Home and Hospital | BA | | | | | 9 | | 14 | | 1 | | 18 | | 42 |
| | MA | | | | | | | | | | | 3 | | 3 |
| | Total | | | | 27 | 9 | 2/ | 14 | 2/ | 1 | 2/ | 21 | 27 | 45 |
| A/Blind | None | | | | 2/ | 1 | | | 2/ | 1 | | | 3/ | 2 |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculations cannot be made due to missing data
3/ Calculations incomplete due to missing data
4/ Employment data unavailable

Uk - Unknown

State Name: Vermont          Overview of Special Education Programs          Data Period 1968-69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) |  |  |  |  | Education Program |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Preschool | Elementary | Secondary | Ungraded |  | Residential | Special | Day Special | Resource | Itinerant |  |
| H-1 | Blind | 4-5 | 6-12 |  |  |  |  |  |  |  | X |  |
| H-2 | Partially Sighted | 4-5 | 6-12 | 13-20 |  |  |  |  |  |  | X |  |
| H-3 | Visually Handicapped |  |  |  |  |  |  |  |  |  |  |  |
| H-4 | Deaf | 3-5 | 6-12 | 13-20 |  |  | X |  |  |  |  |  |
| H-5 | Hard of Hearing | 3-5 |  |  |  |  | X |  |  |  |  |  |
| H-6 | Hearing Handicapped |  |  |  |  |  |  |  |  |  |  |  |
| H-7 | Emotionally Disturbed |  | 6-12 | 13-20 | 5-21 |  | X |  | X |  |  |  |
| H-8 | Mentally Retarded |  |  |  |  |  |  |  |  |  |  |  |
| H-9 | EMR |  | 6-12 | 13-20 |  |  | X |  | X |  |  |  |
| H-10 | TMR |  |  |  | 5-21 |  |  |  | X |  |  |  |
| H-11 | MR (Custodial, Severe, Institutional) |  |  |  |  |  |  |  |  |  |  |  |
| H-12 | Speech Handicaps | 4-5 | 6-12 | 13-20 |  |  |  |  |  |  | X |  |
| H-13 | Speech and Hearing |  |  |  |  |  |  |  |  |  |  |  |
| H-14 | Special Learning Disabilities | 4-5 | 6-12 | 13-20 |  |  | X | X | X | X | X |  |
| H-15 | Brain Injured |  |  |  |  |  |  |  |  |  |  |  |
| H-16 | Physically Handicapped | 4-5 | 6-12 | 13-20 |  |  | X |  |  |  | X |  |
| H-17 | Homebound |  |  |  |  |  |  |  |  |  |  |  |
| H-18 | Blind/Deaf Mentally Retarded |  |  |  | 5-21 |  | X |  | X |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

1/ If no entry is shown, category is not applicable to state

State Name: Vermont Enrollments In Special Education Date Period 1968- 69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type |  |  |  |  | Waiting List |
|---|---|---|---|---|---|---|---|---|
|  |  |  | Residen-tial | Special | Day Special | Resource | Itinerant |  |
| H-1 | Blind | Elementary |  |  |  |  | 9 |  |
| H-2 | Partially Sighted | Preschool |  |  |  |  | 2 |  |
|  |  | Elementary |  |  |  |  | 81 |  |
|  |  | Secondary |  |  |  |  | 45 |  |
| H-4 | Deaf | Preschool | 17 |  |  |  |  |  |
|  |  | Elementary | 37 |  |  |  |  |  |
|  |  | Secondary | 26 |  |  |  |  |  |
| H-5 | Hard of Hearing | Preschool | 4 |  |  |  |  |  |
| H-7 | Emotionally Disturbed | Elementary | 32 |  | 13 |  |  |  |
|  |  | Secondary | 146 |  |  |  |  |  |
|  |  | Ungraded | 30 |  |  |  |  |  |
| H-9 | EMR | Elementary | 50 |  | 449 |  |  | 32 * |
|  |  | Secondary | 34 |  | 354 |  |  |  |
| H-10 | TMR | Elementary | 42 |  | 131 |  |  | 16 * |
|  |  | Secondary |  |  | 11 |  |  |  |
| H-11 | MR (Custodial, Severe, Institution) | Elementary |  |  |  |  |  | 48 * |
| H-12 | Speech Handicaps | Elementary |  |  |  |  | 598 |  |
| H-14 | Special Learning Disabilities | Preschool | 20 | 38 |  |  |  |  |
|  |  | Elementary | 29 | 10 | 69 | 84 | 172 |  |
| H-16 | Physically Handicapped | Preschool | 12 |  |  |  |  |  |
|  |  | Elementary | 9 |  |  |  | 62 |  |
|  |  | Secondary | 2 |  |  |  |  |  |

* Provided by Brandon School only (other waiting list data is not tabulated in Vermont)

State Name: Vermont                    Enrollments In Special Education                    Date Period 1968- 69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Special | Day Special | Resource | Itinerant | |
| H-18 | Blind - Mentally Retarded | Ungraded | | | 4 | | | |
| | Deaf - Mentally Retarded | Ungraded | 5 | | | | | |

Vermont

State Name: Vermont　　Personnel/Pupil Contact Ratio　　Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential | Special | Day Special | Resource | Itinerant |
| H-1 | Blind | Tutor | Elementary | | | | | 1/1 |
| H-2 | Partially Sighted | Counselor | Elementary | | | | | 1/10 |
| | | | Secondary | | | | | 1/10 |
| H-4 | Deaf | Teacher/Academic | Preschool | 1/5 | | | | |
| | | | Elementary | 1/5 | | | | |
| | | | Secondary | 1/5 | | | | |
| | | Teacher/Special | Secondary | 1/10 | | | | |
| | | | Ungraded | 1/10 | | | | |
| H-5 | Hard of Hearing | Teacher | Preschool | 1/8 | | | | |
| H-7 | Emotionally Disturbed | Teacher | Elementary | 1/7 | | 1/8 | | |
| | | | Secondary | 1/8 | | | | |
| | | | All Grades | 1/6 | | | | |
| | | Educational Therapist | Ungraded | 1/6 | | | | |
| | | Aide | Ungraded | 1/6 | | | | |
| H-8 | Mentally Retarded | Teacher | All Grades | 1/10 estimate | | | | |
| | | Aide | All Grades | * | | | | |
| H-9 | EMR | Teacher | Elementary | 1/15 | | 1/15 | | |
| | | | Secondary | | | 1/15 | | |
| | | Aide | Elementary | | | 1/15 | | |
| H-10 | TMR | Teacher | Elementary | | | 1/10 | | |
| | | | Secondary | | | 1/10 | | |
| | | Aide | Elementary | | | 1/12 | | |

* Works with blind retarded only

State Name: Vermont

Personnel/Pupil Contact Ratio

Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential | Special | Day Special | Resource | Itinerant |
| H-10 | TMR (cont.) | Aide | Secondary | | | 1/15 | | |
| H-12 | Speech Handicaps | Speech Pathologist | Elementary | | | | | 1/80 * |
| | | Communication Skills | Elementary | | | | | 1/100 * |
| H-14 | Special Learning Disabilities | Teacher | Preschool | 1/8 | 1/8 | | | |
| | | | Elementary | 1/8 | 1/8 | 1/8 | 1/15 | 1/15 |
| | | Aide | Elementary | | | 1/10 | | |
| H-16 | Physically Handicapped | Teacher | Preschool | 1/15 | | | | |
| | | | Elementary | 1/15 | | | | 1/1 |
| | | | Secondary | 1/5 | | | | |
| H-18 | Blind - MR | Teacher | Ungraded | | | 1/4 | | |
| | Deaf - MR | Teacher | Ungraded | 1/5 | | | | |

* Caseload

State Name: Vermont  Special Education Personnel Estimated Requirements/Employment Comparison [1]  Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| O/ Tutor Blind | BA | Reg | | | | 9 | | | | | | | | 9 |
| | Total | | | | 9 | 9 | | | | | | | 9 | 9 |
| O/Counselor Partially Sighted | MA | X | | | | 5 | | 7 | | | | | | 12 |
| | Total | | | | 8 | 5 | 4 | 7 | | | | | 12 | 12 |
| T/Academic/Deaf | None | X | | | | 1 | | 1 | | | | | | 2 |
| | BA | X | | | | 5 | | 3 | | | | | | 8 |
| | MA | X | | | | 3 | | 2 | | | | | | 5 |
| | Total | | | | 7 | 9 | 5 | 6 | | | | | 12 | 15 |
| T/Special/Deaf | None | X | | | | | | 4 | | 1 | | | | 5 |
| | BA | X | | | | | | 1 | | 1 | | | | 2 |
| | Total | | | | | | 26 | 5 | [2] | 2 | | | 26 | 7 |
| T/Emotionally Disturbed | BA | X | | | | 14 | | 4 | | | | | | 18 |
| | Total | | | | 7 | 14 | 18 | 4 | 5 | [3] | | | 25[2] | 18 |
| T/Educational Therapy | BA | X | | | | | | | | 4 | | | | 4 |
| | Total | | | | | | | | 5 | 4 | | | 5 | 4 |
| T/Emotionally Disturbed | None | X | | | | | | | 5 | 1 | | | 5 | 1 |
| T/EMR | None | X | | | | 1 | | | | | | | | 1 |
| | BA | X | | | | 51 | | 6 | | | | | | 57 |
| | MA | X | | | | 4 | | 4 | | | | | | 8 |
| | Total | | | | 32 | 56 | 24[2] | 10 | | | | | 56[2] | 66 |
| A/EMR | None | | | | 29 | 13 | | | | | | | 29 | 13 |

[1] Based upon enrollment data only (no waiting list data available)
[2] Calculation incomplete due to missing data
[3] Employment data not available

State Name: Vermont

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | Degree Level | Certified | Education Level |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Preschool |  | Elementary |  | Secondary |  | Ungraded |  | Unspecified |  | Total |  |
|  |  |  | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/TMR | BA | X |  |  |  | 13 |  | 1 |  |  |  |  |  | 14 |
|  | Total |  |  |  | 13 2/ | 13 | 1 | 1 |  |  |  |  | 14 2/ | 14 |
| A/TMR | None | X |  |  | 11 | 12 | 1 | 1 |  |  |  |  | 12 | 13 |
| O/Speech Pathologist | MA | X |  |  |  | 2 |  |  |  |  |  |  |  | 2 |
|  | Total |  |  |  | 7 | 2 |  |  |  |  |  |  | 7 | 2 |
| T/Communication Skills | BA | X |  |  |  | 8 |  |  |  |  |  |  |  | 8 |
|  | Total |  |  |  | 6 | 8 |  |  |  |  |  |  | 6 | 8 |
| T/Special Learning Disabilities | BA | X |  | 7 |  | 15 |  |  |  |  |  |  |  | 22 |
|  | MA | X |  |  |  | 5 |  |  |  |  |  |  |  | 5 |
|  | Total |  | 7 | 7 | 30 | 20 |  |  |  |  |  |  | 37 | 27 |
| A/Special Learning Disabilities | None | X |  |  | 7 | 2 |  |  |  |  |  |  | 7 | 2 |
| T/Physically Handicapped | BA | X |  | 2 |  | 14 |  | 1 |  |  |  |  |  | 17 |
|  | Total |  | 1 | 2 | 63 | 14 | 1 | 1 |  |  |  |  | 65 | 17 |
| T/Blind MR | MA | X |  |  |  |  |  | 1 |  |  |  |  |  | 1 |
|  | Total |  |  |  |  |  | 1 | 1 |  |  |  |  | 1 | 1 |
| T/Deaf MR | BA | X |  |  |  |  |  | 1 |  |  |  |  |  | 1 |
|  | Total |  |  |  |  |  | 1 | 1 |  |  |  |  | 1 | 1 |
| T/Mentally Retarded | BA | X |  |  |  |  |  |  |  |  |  | 10 |  | 10 |
|  | Total |  |  |  |  |  |  |  |  |  | 4/ | 10 | 4/ | 10 |
| A/Mentally Retarded | None |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
|  | Total |  |  |  |  |  |  |  |  |  | 4/ | 1 | 4/ | 1 |

1/ Based upon enrollment data only (no waiting list data available)
2/ Calculation incomplete due to missing data
4/ Calculations cannot be made due to missing data

State Name: Virginia

Overview of Special Education Programs

Data Period 1968-69

| Handicap Code | Handicap Category [1] | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Elementary | | Secondary | | | | | | | | |
| | | Primary | Inter-mediate | Advanced (Jr. High) | Sr. High | Unspecified | Residential Special Class | Day Special Class | Resource Room | Itinerant | Hospital: Rapid Turnover | Consulta-tion Services |
| H-1 | Blind | | | | | | | | | | | |
| H-2 | Partially Sighted | | | | | | | | | | | |
| H-3 | Visually Impaired | 6-12 | | 13-18 | | | X | | | X | | X |
| H-4 | Deaf | | | | | | | | | | | |
| H-5 | Hard of Hearing | | | | | | | | | | | |
| H-6 | Hearing Impaired | 6-12 | | 13-18 | | | X | X | | X | | |
| H-7 | Emotionally Disturbed | 6-12 | | 13-18 | | | X | X | X | | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 7-9 | 10-12 | 13-15 | 16-18 | | X | X | | | | |
| H-10 | TMR | 5-8 | 9-13 | 14-18 | | | X | X | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | | 6-18 | | | | X | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities [2] | 6-12 | | 13-18 | | | | X | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped [3] | 6-12 | | 13-18 | | | X | X | | X | X | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

[1] If no entry is shown, category is not applicable to the state

[2] Called Neurologically Impaired

[3] Includes TB Hospitals

State Name: Virginia

## Enrollments In Special Education

Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Day Special Class | Resource Room | Itinerant | Hospital Rapid Turnover | |
| H-3 | Visually Handicapped | Unspecified | 262 | | 262 | 197 | | 413 |
| H-6 | Hearing Handicapped | Unspecified | 523 | 109 | | 978 | | |
| H-7 | Emotionally Disturbed | Unspecified | 157 | 501 | 564 | | | |
| H-9 | EMR | Unspecified | 233 | 11,752 | | | | |
| H-10 | TMR | Unspecified | 177 | 1741 | | | | |
| H-12 | Speech Handicaps | Unspecified | | | | 17,999 | | |
| H-14 | Special Learning Disabilities | Unspecified | | 248 | | | | |
| H-16 | Physically Handicapped | Unspecified | 1109 | 279 | | 467 | 282 | |

State Name: Personnel/Pupil Contact Ratio Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential Special Class | Day Special Class | Resource Room | Itinerant | Hospital Rapid Turn-over |
| H-3 | Visually Handicapped | Teacher | All Grades | 1/6 | | 1/30 | 1/40 | |
| | | Consultant | All Grades | 1/60 | | 1/60 | 1/60 | |
| H-6 | Hearing Handicapped | Teacher | All Grades | 1/6 | 1/6 | | 1/40 | |
| | | Aide | All Grades | | 1/6 | | 1/40 | |
| H-7 | Emotionally Disturbed | Teacher | All Grades | 1/8 | 1/8 | 1/20 | | |
| | | Aide | All Grades | | 1/8 | | | |
| H-9 | EMR | Teacher | All Grades | 1/6 | 1/15 | | | |
| H-10 | TMR | Teacher | All Grades | 1/11 | 1/11 | | | |
| | | Attendant | All Grades | | 1/11 | | | |
| H-12 | Speech Handicaps | Therapist | All Grades | | | | 1/100 | |
| H-14 | Neurologically Impaired | Teacher | All Grades | | 1/8 | | | |
| H-16 | Physically Impaired | Teacher | All Grades | 1/50 | 1/10 | | 1/50 | 1/100 |
| | | Attendant | All Grades | | 1/10 | | | |
| | | Physical Therapist | All Grades | | 1/13 | | | |

Virginia

State Name: Virginia

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually | BA | X | | | | | | | | | | 3 | | 3 |
| | MA | X | | | | | | | | | | 8 | | 8 |
| | Uk | X | | | | | | | | | | 58 | | 58 |
| | Total | | | | | | | | | | 64 | 69 | 64 | 69 |
| T/Children with Hearing Disorders | Uncer | | | | | | | | | | | 8 | | 8 |
| | Uk | X | | | | | | | | | | 117 | | 117 |
| | Total | | | | | | | | | | 129 | 125 | 129 | 125 |
| T/Hearing Impaired | Uk | | | | | | | | | | 18 | 2/ | 18 | 2/ |
| T/Emotionally Disturbed | Uncer | | | | | | | | | | | 31 | | 31 |
| | Uk | X | | | | | | | | | | 41 | | 41 |
| | Total | | | | | | | | | | 110 | 72 | 110 | 72 |
| A/Emotionally Disturbed | Uk | | | | | | | | | | 62 | 2/ | 62 | 2/ |
| T/Mentally Retarded | Uncer | | | | | | | | | | | 723 | | 723 |
| | Uk | X | | | | | | | | | | 248 | | 248 |
| | Total | | | | | | | | | | 972 | 971 | 972 | 971 |
| O/Attendant - TMR | Uk | | | | | | | | | | 158 | 72 | 158 | 72 |
| Th/Speech | Uncer | | | | | | | | | | | 26 | | 26 |
| | Uk | X | | | | | | | | | | 152 | | 152 |
| | Total | | | | | | | | | | 179 | 178 | 179 | 178 |
| T/Neurologically Handicapped | Uncer | | | | | | | | | | | 14 | | 14 |
| | Uk | | | | | | | | | | | 9 | | 9 |

1/ Based upon enrollment data only (no waiting list data available)

2/ Employment data unavailable

State Name: Virginia

Special Education Personnel Estimated Requirements/Employment Comparison 1/

Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level: Preschool Esti-mated | Preschool Employed | Elementary Esti-mated | Elementary Employed | Secondary Esti-mated | Secondary Employed | Ungraded Esti-mated | Ungraded Employed | Unspecified Esti-mated | Unspecified Employed | Total Esti-mated | Total Employed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T/Neurologically (cont) | Total | | | | | | | | | | 62 | 23 | 62 | 23 |
| T/Children with Crippling Conditions | Uncer. | | | | | | | | | | | 33 | | 33 |
| | Uk | | | | | | | | | | | 14 | | 14 |
| | Total | | | | | | | | | | 62 | 47 | 62 | 47 |
| O/Attendant for P.H. | Uk | | | | | | | | | | 28 | 10 | 28 | 10 |
| Th/Physical | | | | | | | | | | | 21 | 2/ | 21 | 2/ |

1/ Based upon enrollment data only (no waiting list data available)
2/ Employment data unavailable

State Name: Washington Overview of Special Education Programs Data Period 1969-70

| Handicap Code | Handicap Category [1] | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | | | | | | | | |
| | | | | Jr. High | High | | | | | | | |
| H-1 | Blind | 3-5 | 6-12 | 13-15 | 16-21 | | | | | | | |
| H-2 | Partially Sighted | 3-5 | 6-12 | 13-15 | 16-21 | | | | | | | |
| H-3 | Visually Handicapped | | 6-12 | 13-15 | 16-21 | | | | | | | |
| H-4 | Deaf | 3-5 | 6-12 | 13-15 | 16-21 | | | | | | | |
| H-5 | Hard of Hearing | 3-5 | 6-12 | 13-15 | 16-21 | | | | | | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally | 3-5 | 6-12 | 13-15 | 16-21 | | | | | | | |
| H-8 | Mentally Retarded | | | | | | | Not Applicable | | | | |
| H-9 | EMR | 3-5 | 6-21 | 13-15 | 16-21 | | | | | | | |
| H-10 | TMR | 3-5 | 6-21 | 13-15 | 16-21 | | | | | | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | | | | | | |
| H-12 | Speech Handicaps | | | | | | | | | | | |
| H-13 | Speech and Hearing | 3-5 | 6-12 | 13-15 | 16-21 | | | | | | | |
| H-14 | Special Learning Disabilities [2] | | | | | | | | | | | |
| H-15 | Brain Injured [3] | 3-5 | 6-12 | 13-15 | 16-21 | | | | | | | |
| H-16 | Physically Handicapped [4] | 3-5 | 6-12 | 13-15 | 16-21 | | | | | | | |
| H-17 | Homebound | | | | | | | | | | | |
| H-18 | Multiple Handicapped | 3-5 | 6-12 | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

[1] If no entry is shown, category is not applicable to the state
[2] Includes Language Disabilities
[3] Includes Neurologically Impaired
[4] Called Orthopedically Handicapped

Washington

State Name: Washington    Enrollments In Special Education    Data Period 1969-70

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | All Programs | | | | | |
| H-15 | Brain Injured (Neurologically Handicapped) | Preschool | 16 | | | | | 10 |
| | | Elementary | 697 | | | | | 121 |
| | | Secondary | 340 | | | | | 41 |
| H-16 | Physically Handicapped (Orthopedically Handicapped) | Preschool | 51 | | | | | 48 |
| | | Elementary | 374 | | | | | 41 |
| | | Secondary | 182 | | | | | 47 |
| H-12 | Speech Handicaps | Unspecified | 41,816 | | | | | |

State Name: Washington Enrollments In Special Education Data Period 1969-70

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type |  |  |  |  | Waiting List |
|---|---|---|---|---|---|---|---|---|
|  |  |  | All Programs |  |  |  |  |  |
| H-1 | Blind | Preschool | 20 |  |  |  |  | 3 |
|  |  | Elementary | 56 |  |  |  |  |  |
|  |  | Secondary | 45 |  |  |  |  | 4 |
| H-2 | Partially Sighted | Preschool | 2 |  |  |  |  |  |
|  |  | Elementary | 59 |  |  |  |  | 6 |
|  |  | Secondary | 38 |  |  |  |  | 12 |
| H-4 | Deaf | Preschool | 85 |  |  |  |  | 27 |
|  |  | Elementary | 159 |  |  |  |  | 4 |
|  |  | Secondary | 61 |  |  |  |  |  |
| H-5 | Hard of Hearing | Preschool | 25 |  |  |  |  | 16 |
|  |  | Elementary | 185 |  |  |  |  | 46 |
|  |  | Secondary | 53 |  |  |  |  | 43 |
| H-9 | EMR | Preschool | 96 |  |  |  |  | 42 |
|  |  | Elementary | 5216 |  |  |  |  | 451 |
|  |  | Secondary | 6398 |  |  |  |  | 344 |
| H-10 | TMR | Preschool | 27 |  |  |  |  | 45 |
|  |  | Elementary | 1003 |  |  |  |  | 112 |
|  |  | Secondary | 669 |  |  |  |  | 57 |
| H-7 | Emotionally Disturbed | Preschool | 18 |  |  |  |  | 7 |
|  |  | Elementary | 1283 |  |  |  |  | 522 |
|  |  | Secondary | 2114 |  |  |  |  | 410 |

State Name: Washington Personnel/Pupil Contact Ratio Data Period 1969-70

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Special Schools | Special Classes | | | |
| H-1 | Blind | Teacher | All Grades | 1/6-1/10 | 1/6-1/10 | | | |
| H-2 | Partially Sighted | Teacher | All Grades | 1/6-1/12 | 1/6-1/12 | | | |
| H-4 | Deaf | Teacher | All Grades | 1/4-1/8 | 1/4-1/8 | | | |
| H-5 | Hard of Hearing | Teacher | All Grades | 1/6-1/8 | 1/6-1/8 | | | |
| H-7 | Emotionally Disturbed | Teacher | Elementary | 1/6-1/8 | 1/6-1/8 | | | |
| | | | Secondary* | 1/6-1/10 | 1/6-1/10 | | | |
| H-9 | EMR | Teacher | Preschool | 1/6-1/10 | 1/6-1/10 | | | |
| | | | Elementary | 1/8-1/12 | 1/8-1/12 | | | |
| | | | Secondary** | 1/8-1/16 | 1/8-1/12 | | | |
| H-10 | TMR | Teacher | Preschool | 1/6-1/8 | 1/6-1/8 | | | |
| | | | Elementary | 1/8-1/10 | 1/8-1/10 | | | |
| | | | Secondary | 1/8-1/10 | 1/8-1/10 | | | |
| H-15 | Brain Injured | Teacher | All Grades | 1/4-1/8 | 1/4-1/8 | | | |
| H-16 | Physically Handicapped | Teacher | All Grades | 1/4 | 1/4 | | | |
| H-18 | Multiple Handicapped | Teacher | All Grades | 1/4 | | | | |

* Secondary is broken down into Junior High with ratio 1/6-1/8 and High School 1/8-1/10

** Secondary is broken down into Junior High with ratio 1/8-1/12 and High School 1/8-1/16

2

State Name: Washington

Special Education Personnel Estimated Requirements/Employment Comparison[1/]

Data Period 1969-70

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind | Uk | | 2-4 | | 5-10 | | 5-8 | | | | | | 12-22 | |
| T/Partially Sighted | Uk | | 1 | | 5-10 | | 4-8 | | | | | | 10-19 | |
| T/Deaf | Uk | | 14-28 | | 20-40 | | 8-15 | | | | | | 42-88 | |
| T/Hard of Hearing | Uk | | 5-7 | | 29-39 | | 12-16 | | | | | | 46-62 | |
| T/Emotionally Disturbed | Uk | | | | 225-300 | | 290-378 | | | | | | 515-678 | |
| T/EMR | Uk | | 14-23 | | 472-708 | | 505-774 | | | | | | 991-1505 | |
| T/TMR | Uk | | 9-12 | | 112-139 | | 73-91 | | | | | | 194-242 | |
| T/Orthopedically Handicapped | Uk | | 25 | | 104 | | 57 | | | | | | 185 | |
| T/Neurologically Handicapped | Uk | | 3-6 | | 102-204 | | 48-95 | | | | | | 153-305 | |
| | | | | | | | | | | | | | | Total<br>1260 |

1/ Total special education classroom teachers for 1968-69 was 1260. (No breakdown by handicap level available)
Uk - Unknown

State Name: West Virginia Overview of Special Education Programs Data Period 1969-70

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) |  |  |  |  | Education Program |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Unspecified |  |  |  |  | Residential Special Class |  | Itinerant | No Program Breakdown |  |  |
| H-1 | Blind |  |  |  |  |  |  |  |  |  |  |  |
| H-2 | Partially Sighted |  |  |  |  |  |  |  |  |  |  |  |
| H-3 | Visually Handicapped | 2/ |  |  |  |  |  |  |  | X |  |  |
| H-4 | Deaf |  |  |  |  |  |  |  |  |  |  |  |
| H-5 | Hard of Hearing |  |  |  |  |  |  |  |  |  |  |  |
| H-6 | Hearing Handicapped | 2/ |  |  |  |  |  |  |  |  |  |  |
| H-7 | Emotionally |  |  |  |  |  |  |  |  |  |  |  |
| H-8 | Mentally Retarded |  |  |  |  |  |  |  |  |  |  |  |
| H-9 | EMR | 2/ |  |  |  |  |  |  |  | X |  |  |
| H-10 | TMR |  |  |  |  |  |  |  |  | X |  |  |
| H-11 | MR (Custodial, Severe, Institutional) | 2/ |  |  |  |  |  |  |  |  |  |  |
| H-12 | Speech Handicaps |  |  |  |  |  |  |  |  |  |  |  |
| H-13 | Speech and Hearing | 2/ |  |  |  |  |  |  |  | X |  |  |
| H-14 | Special Learning Disabilities | 2/ |  |  |  |  |  |  |  |  |  |  |
| H-15 | Brain Injured |  |  |  |  |  |  |  |  |  |  |  |
| H-16 | Physically Handicapped | 2/ |  |  |  |  | X |  |  |  |  |  |
| H-17 | Homebound | 2/ |  |  |  |  |  |  | X |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

1/ If no entry is shown, category is not applicable to the state
2/ Permissive legislation 2-3 years, mandatory legislation 6-21 years

State Name: West Virginia    Enrollments In Special Education    Data Period 1969-70

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential Special Class | Itinerant | All Programs | | | |
| H-3 | Visually Handicapped | Unspecified | | | 132 | | | Not Available |
| H-9,10 | EMR and TMR | Unspecified | | | 4179 | | | |
| H-13 | Speech and Hearing | Unspecified | | | 2297 | | | |
| H-16 | Physically Handicapped | Unspecified | 143 | | | | | |
| H-17 | Homebound | Unspecified | | 1071 | | | | |

State Name: West Virginia Personnel/Pupil Contact Ratio Data Period 1969-70

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | |
|---|---|---|---|---|---|---|---|
| | | | | Residential Special Class | | | |
| H-4 | Deaf | Teacher | All Grades | 1/5-1/8 | | | |
| H-9 | EMR | Teacher | All Grades | 1/15 | | | |
| | | Teacher with Aide | All Grades | 1/21 | | | |
| H-11 | MR (Institutionalized) | Supervisor | All Grades | 1/10-1/14 | | | |
| | | Aides | All Grades | 1/5-1/7 | | | |

State Name: West Virginia Special Education Personnel Estimated Requirements/Employment Comparison Data Period 1969-70

| Occupation<br>T=Teacher A=Aide<br>Th=Therapist O=Other | | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Mentally Retarded | | Uk | | | | | | | | | | 1/ | 308 | 1/ | 308 |
| Th/Speech and Hearing | | Uk | | | | | | | | | | 1/ | 31 | 1/ | 31 |
| T/Physically Handicapped | | | | | | | | | | | | 1/ | 14 | 1/ | 14 |
| T/Homebound | Part-Time | Uk | | | | | | | | | | | 539 | | 539 |
| | Full-Time | Uk | | | | | | | | | | | 22 | | 22 |
| | | Total | | | | | | | | | | 1/ | 561 | 1/ | 561 |

1/ Calculations cannot be made due to missing data.
Uk - Unknown

State Name: Wisconsin Overview of Special Education Programs Data Period 1968-69

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Elementary | | Secondary | | | | | | | |
| | | Preschool | Primary | Inter-mediate | Jr. High | Sr. High | Residential | Special Schools | Day Special Class | Itinerant | No Program Breakdown | |
| H-1 | Blind | 1-6 | 5-9 | 10-12 | 13-15 | 16-20 | | X | | | | |
| H-2 | Partially Sighted | 1-6 | 5-9 | 10-12 | 13-15 | 16-20 | | | X | X | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | 1-6 | 5-9 | 10-12 | 13-15 | 16-20 | | X | X | | | |
| H-5 | Hard of Hearing | 1-6 | 5-9 | 10-12 | 13-15 | 16-20 | | | | X | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally | 1-6 | 5-9 | 10-12 | 13-15 | 16-20 | | X | | X | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | 1-6 | 5-9 | 10-12 | 13-15 | 16-20 | X | X | | | X | |
| H-10 | TMR | 1-6 | 5-9 | 10-12 | 13-15 | 16-20 | X | X | | | X | |
| H-11 | MR (Custodial, Severe, Institutional) | 1-6 | 5-9 | 10-12 | 13-15 | 16-20 | X | X | | | | |
| H-12 | Speech Handicaps | 1-6 | 5-9 | 10-12 | 13-15 | 16-20 | | | | X | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | 1-6 | 5-9 | 10-12 | 13-15 | 16-20 | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped 2/ | 1-6 | 5-9 | 10-12 | 13-15 | 16-20 | | | | X | | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state

2/ Orthopedic

State Name: Wisconsin

Enrollments In Special Education

Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type: Residential | Special Schools | Itinerant | Day Special and Itinerant | No Program Breakdown | Waiting List |
|---|---|---|---|---|---|---|---|---|
| H-1 | Blind | Preschool | | 9 | | | | Not Available |
| | | Elementary | | 51 | | | | |
| | | Secondary | | 114 | | | | |
| H-2 | Partially Sighted | Preschool | | | | 34 | | |
| | | Elementary | | | | 93 | | |
| | | Secondary | | | | 47 | | |
| H-4 | Deaf | Preschool | | 9 | | | | |
| | | Elementary | | 53 | | | | |
| | | Secondary | | 129 | | | | |
| H-5 | Hard of Hearing | Preschool | | | | 188 | | |
| | | Elementary | | | | 418 | | |
| | | Secondary | | | | 120 | | |
| H-7 | Emotionally Disturbed | Preschool | | 63 | | | | |
| | | Elementary | | 68 | | | 445 | |
| | | Secondary | | 73 | | | 240 | |
| H-9 | EMR | Preschool | 2 | 47 | | | 272 | |
| | | Elementary | 22 | 36 | | | 564 | |
| | | Secondary | 90 | 77 | | | 769 | |
| H-10 | TMR | Preschool | 13 | 94 | | | | |
| | | Elementary | 72 | 107 | | | | |
| | | Secondary | 153 | 107 | | | | |
| | | Ungraded | | | | | 1774 | |

State Name: Wisconsin Enrollments In Special Education Data Period 1968-69

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Special Schools | Itinerant | Day Special and Itinerant | No Program Breakdown | |
| H-11 | MR (Institutionalized) | Preschool | 63 | 36 | | | | |
| | | Elementary | 266 | 76 | | | | |
| | | Secondary | 211 | 59 | | | | |
| H-12 | Speech Handicaps | Preschool | | | 873 | | | |
| | | Elementary | | | 19,708 | | | |
| | | Secondary | | | 2727 | | | |
| | | Ungraded | | | 2151 | | | |
| H-14 | Special Learning Disabilities | Elementary | | | | | 223 | Not Available |
| H-16 | Physically Handicapped | Elementary | | | | | 1012 | |

State Name: Wisconsin Personnel/Pupil Contact Ratio Data Period 1968-69

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | |
|---|---|---|---|---|---|---|---|
| | | | | Day Special | Resource Room | All Programs | |
| H-1 | Blind | Teacher | Preschool | | | 1/12 | |
| | | | Elementary | | | 1/12 | |
| | | | Secondary | | | 1/4 | |
| H-2 | Partially Sighted | Teacher | Preschool | | | 1/12 | |
| | | | Elementary | | | 1/12 | |
| | | | Secondary | | | 1/4 | |
| H-4 | Deaf | Teacher | Preschool | | | 1/12 | |
| | | | Elementary | | | 1/12 | |
| | | | Secondary | | | 1/4 | |
| H-5 | Hard of Hearing | Teacher | Preschool | | | 1/12 | |
| | | | Elementary | | | 1/12 | |
| | | | Secondary | | | 1/4 | |
| H-7 | Emotionally Disturbed | Teacher | All Grades | 1/8 | 1/15 | | |
| H-9 | EMR | Teacher | Preschool | | | 1/8-1/12 | |
| | | | Elementary | | | 1/10-1/15 | |
| | | | Secondary | | | 1/14-1/20 | |
| H-10 | TMR | Teacher | All Grades | | | 1/5-1/10 | |
| H-12 | Speech Handicaps | Teacher | All Grades | | | 1/30-1/200 | |
| H-14 | Special Learn. Disability | Teacher | All Grades | 1/8 | 1/15 | | |
| H-16 | Physically Handicapped | Teacher | All Grades | | | 1/15 | |
| | | | | | | | |
| | | | | | | | |

State Name: Wisconsin Special Education Personnel Estimated Requirements/Employment Comparison[1] Data Period 1968-69

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Visually Handicapped | Uk | X | 4 | 7 | 13 | 10 | 40 | 21 | | | | | 57 | 38 |
| T/Hearing Handicapped | Uk | X | 17 | 22 | 40 | 56 | 62 | 92 | | | | | 119 | 170 |
| T/Emotionally Disturbed | Uk | X | | | [2] | | [2] | 66 | | | | | [2] | 117 |
| T/EMR | Uk | X | 22-34[3] | 29 | 37-56[3] | 564 | 38-55[3] | 769 | | | | | 97-145[3] | 1362 |
| T/TMR | Uk | X | | | | | | | | | 232-827 | [4] | 232-827 | [4] |
| T/Mentally Retarded | Uk | X | | | | | | | | | | | [2] | [4] |
| T/Speech Handicaps | Uk | X | | | | | | | | | 122-848 | [4] | 122-848 | [4] |
| T/Special Learning Disabilities | Uk | X | | | [2] | 17 | | | | | | | [2] | 17 |
| T/Physically Handicapped | Uk | X | | | | | [2] | 52 | | | 67 | [4] | 67 | 52 |
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |

[1] Based upon enrollment data only (no waiting list data available)
[2] Calculations cannot be made due to missing data
[3] Calculations incomplete due to missing data
[4] Employment data unavailable

Uk - Unknown

State Name: Wyoming  Overview of Special Education Programs  Data Period 1968-1969

| Handicap Code | Handicap Category 1/ | Education Level (Age Ranges) | | | | | Education Program | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Preschool | Elementary | Secondary | | | Residential | Special Schools | Regular Classroom | No Program Breakdown | | |
| H-1 | Blind | | | | | | | | X | | | |
| H-2 | Partially Sighted | | | | | | | | X | | | |
| H-3 | Visually Handicapped | | | | | | | | | | | |
| H-4 | Deaf | | | | | | X | X | | X | | |
| H-5 | Hard of Hearing | | UNAVAILABLE | | | | | | | X | | |
| H-6 | Hearing Handicapped | | | | | | | | | | | |
| H-7 | Emotionally Disturbed | | | | | | | | | X | | |
| H-8 | Mentally Retarded | | | | | | | | | | | |
| H-9 | EMR | | | | | | X | X | | X | | |
| H-10 | TMR | | | | | | X | X | | X | | |
| H-11 | MR (Custodial, Severe, Institutional) | | | | | | X | X | | | | |
| H-12 | Speech Handicaps | | | | | | | | | X | | |
| H-13 | Speech and Hearing | | | | | | | | | | | |
| H-14 | Special Learning Disabilities | | | | | | | | | | | |
| H-15 | Brain Injured | | | | | | | | | | | |
| H-16 | Physically Handicapped | | | | | | | | | X | | |
| H-17 | Homebound | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

1/ If no entry is shown, category is not applicable to the state

State Name: Wyoming

Enrollments In Special Education

Data Period 1968-1969

| Handicap Code | Handicap Category | Education Level | Enrollments By Special Education Program Type | | | | | Waiting List |
|---|---|---|---|---|---|---|---|---|
| | | | Residential | Special Schools | Regular Classrooms | No Program Breakdown | | |
| H-1 | Blind | Preschool | | | 3 | | | |
| | | Elementary | | | 22 | | | |
| | | Secondary | | | 34 | | | |
| H-2 | Partially Sighted | Elementary | | | 34 | | | |
| | | Secondary | | | 32 | | | |
| | | Unspecified | | | | 5 | | |
| H-4 | Deaf | Preschool | 4 | | | | | NOT AVAILABLE |
| | | Elementary | 40 | | | | | |
| | | Secondary | 6 | 14 | | | | |
| | | Unspecified | | | | 4 | | |
| H-5 | Hard of Hearing | Unspecified | | | | 7 | | |
| H-7 | Emotionally Disturbed | Unspecified | | | | 89 | | |
| H-9 | EMR | Unspecified | 141 | 14 | | 505 | | |
| H-10 | TMR | Unspecified | 182 | 28 | | 73 | | |
| H-11 | MR (Institutionalized) | Unspecified | 244 | 26 | | | | |
| H-12 | Speech Handicaps | Unspecified | | | | 15 | | |
| H-16 | Physically Handicapped | Unspecified | | | | 19 | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

State Name: Wyoming　　Personnel/Pupil Contact Ratio　　Data Period 1968- 1969

| Handicap Code | Handicap Category | Occupation | Education Level | Special Education Program Types | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | All Programs | | | | |
| H-1 | Blind | Teacher | All Grades | 1/10 | | | | |
| H-2 | Partially Sighted | Teacher | All Grades | 1/10 | | | | |
| H-4 | Deaf | Teacher | All Grades | 1/10 | | | | |
| H-5 | Hard of Hearing | Teacher | All Grades | 1/10 | | | | |
| H-7 | Emotionally Disturbed | Teacher | All Grades | 1/10 | | | | |
| H-9 | EMR | Teacher | All Grades | 1/6 | | | | |
| H-10 | TMR | Teacher | All Grades | 1/5 | | | | |
| H-11 | MR (Institutionalized) | Teacher | All Grades | 1/5 | | | | |
| H-12 | Speech Handicaps | Therapist | All Grades | 1/50 | | | | |
| H-16 | Physically Handicapped | Teacher | All Grades | 1/10 | | | | |

State Name: Wyoming Special Education Personnel Estimated Requirements/Employment Comparison 1/ Data Period 1968-1969

| Occupation<br>T-Teacher A-Aide<br>Th-Therapist O-Other | Degree Level | Certified | Education Level | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preschool | | Elementary | | Secondary | | Ungraded | | Unspecified | | Total | |
| | | | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed | Esti-mated | Employed |
| T/Blind | Uk | | 1 | 2/ | 2 | 2/ | 3 | 2/ | | | | | 6 | 2/ |
| T/Partially Sighted | Uk | | | | 3 | 2/ | 3 | 2/ | | | | | 6 | 2/ |
| T/Deaf | Uk | | .5 | 2/ | 4 | 2/ | 2 | 2/ | | | | | 6.5 | 2/ |
| T/Hard of Hearing | Uk | | | | | | | | | | 1 | 2/ | 1 | 2/ |
| T/Emotionally Disturbed | Uk | | | | | | | | | | 9 | 2/ | 9 | 2/ |
| T/EMR | Uk | | | | | | | | | | 110 | 2/ | 110 | 2/ |
| T/TMR | Uk | | | | | | | | | | 57 | 2/ | 57 | 2/ |
| T/Mentally Retarded | Uk | | | | | | | | | | 54 | 2/ | 54 | 2/ |
| Th/Speech | Uk | | | | | | | | | | 1 | 2/ | 1 | 2/ |
| T/Physically Handicapped | Uk | | | | | | | | | | 2 | 2/ | 2 | 2/ |

1/ Based upon enrollment data only (no waiting list data available)
2/ Employment data unavailable
Uk - Unknown

# APPENDIX 2

## COST ESTIMATES FOR IMPLEMENTATION AND MAINTENANCE OF INFORMATION FLOW

### INTRODUCTION

2.1 As a result of the survey visit to each state, recommendations were made for the development and implementation of a special education information flow that would improve the quality and quantity of data available to each state special education agency, and would also provide the data elements necessary to support the manpower requirements projection model application. These recommended actions are presented in the individual state analysis reports contained in Part D, State Analysis Reports, of this Phase III Report.

2.2 The specific resources needed to implement the recommendations and maintain the system once it is established are contained in Section VIII, Resource Requirements, of each state analysis report. For the convenience of the Bureau of Education for the Handicapped, these resource requirements are summarized in this appendix.

### DISCUSSION OF COST ESTIMATES

2.3 The resource requirements to implement and maintain the information flow are contained in individual tables for each state. The format and content of these tables are described in the following paragraphs.

#### Resource Category

2.4 The resources required are broken down by type of manpower and computer application. The special education staff category refers to those professionals responsible for the management and administration of the state special education agency or its equivalent. The task for which they would be primarily responsible is coordination with the local districts and other state agencies to ensure their understanding of the data requirements and participation in the information flow process. This would include training local district and other agencies' personnel to fill out the new forms engendering support for the information system, and ensuring completeness and validity of reported data.

2.5 The form-designing tasks include the responsibility for creating forms that will permit the required data to be collected in an orderly and efficient manner. The forms must be easy to understand and convertible to computer input format. Many existing reporting formats have been prepared by those with little skill in designing good reporting forms.

2.6 The tasks of the systems analyst include data element evaluation, data source determination, systems analysis, preparation of systems specification, procedure preparation, and system validation.

2.7 The programmer is responsible for preparing the computer programs that will accept the formatted input data, process them according to specifications, and produce the required output formats.

2.8 Clerical personnel are responsible for the manual procedures necessary to the sorting, filing, extraction, and summarization of information where automated procedures have not been applied.

2.9 Keypunch operators convert the field data to a format acceptable for input to the computer.

2.10 The computer resources have been subdivided into processing requirements and Manpower Requirements Projection Model requirements because the MRPM computer requires a minimum of 24,000-word storage capacity, whereas most information processing requirements do not require such a capacity.

Estimated Rate

2.11 The estimated rate is the salary that personnel could receive or, for the computer, the usage rate that would be charged to the special education agency for use of the machine. In some cases, no usage charge has been applied, because either there would be no charge to the special education agency or the rate was not known and therefore not assumed by the contractor.

2.12 With the exception of the special education staff, the salary rates applied were derived from information contained in an article in Business Automation Magazine.[1] The rates used approximated the average rates for senior people in each category. Rates for special education personnel were not available; however, to represent the cost of this resource category in the cost estimate, a rate similar to that of the senior systems analyst was applied.

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[1] "EDP Salary Study-1969," Business Automation Magazine, July 1969.

### Implementation

2.13 The installation of an information system involves two major phases: the design and implementation phase, and the maintenance or operating phase. In the design and implementation phase, the system concept is developed, the system design formulated, computer programs are written, the system is tested and debugged, and the system validation is completed. At the conclusion of the phase, the system should be operational. Costs associated with this phase are one-time expenditures.

### Maintenance

2.14 This phase is concerned with ensuring that the system is operational and responsive to user requirements. This includes coordination of inputs, quality control, improvements, and preparation of special report specifications. Costs in this phase are anticipated annual expenditures.

### Type of Information System

2.15 The spaces immediately below the "Implementation" and "Maintenance" titles contain a very brief identification of the type(s) of system(s) recommended in the state analysis report. When alternative recommendations have been made, more than one system appears under each phase heading.

### Estimated Time

2.16 This column contains an estimate of the working time required by each resource to accomplish the implementation and maintenance of the information flow. The units of time are as indicated in the estimated rate column.

### Cost

2.17 The Cost column contains a multiplicative conversion of the Estimated Rate and Estimated Time columns. Values have been rounded off to the nearest five dollars.

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: **Alabama**

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated Data Sum Sys | | Manual System | | Automated Data Sum Sys | | Manual System | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1050 /mo. | 6 | 6300 | 6 | 6300 | 2 | 2100 | 2 | 2100 |
| Forms Designer | | 700 /mo. | .5 | 350 | .5 | 350 | | | | |
| System Analyst | | 1050 /mo. | .5 | 525 | | | .1 | 100 | | |
| Programmer | | 800 /mo. | 1 | 800 | | | .25 | 200 | | |
| Clerical | | 500 /mo. | | | 2 | 1000 | | | 2 | 1000 |
| Keypunch | | 2.20 /hr. | 200 | 440 | 4 | 10 | 200 | 440 | | |
| Computer | Process | /hr. | 4 | | 0 | | 2 | | 0 | |
| | MRPM * | 150 /hr. | .5 | 75 | .5 | 75 | .5 | 75 | .5 | 75 |
| TOTALS | | | | $8490 | | $7735 | | $2915 | | $3175 |

Comments:

* For MRPM use, since the in-house computer does not have a FORTRAN compiler and the MRPM computer program is not written in PL/1, outside computer time must be leased

State: **Alaska**

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1050 /mo. | 2 | 2220 | | | 1 | 1060 | | |
| Forms Designer | | /mo. | ** | | | | | | | |
| System Analyst | | 1060 /mo. | 1.5 | 1590 | | | .25 | 265 | | |
| Programmer | | 860 /mo. | 1 | 860 | | | .25 | 215 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50 /hr. | 60 | 150 | | | 50 | 125 | | |
| Computer | Process | * /hr. | 5 | | | | 3 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $4820 | | | | $1665 | | |

Comments:

* Computer:IBM 360/40, no usage cost assumed

** Included in System Analyst time

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: **Arizona**

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated Intradepartmental | | Automated * Intradepartmental | | Automated (Both) | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1030 /mo. | 2 | 2060 | 1 | 1030 | .5 | 515 | | |
| Forms Designer | | /mo. | ** | | | | | | | |
| System Analyst | | 1030 /mo. | 2 | 2060 | .5 | 515 | .25 | 260 | | |
| Programmer | | 860 /mo. | 1 | 860 | .25 | 215 | .25 | 215 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30 /hr. | 100 | 230 | | | 90 | 200 | | |
| Computer | Process | 40 /hr. | 6 | 240 | | | 4 | 160 | | |
| | MRPM | 150 /hr. | .5 | 75 | | | .5 | 75 | | |
| TOTALS | | | | $5525 | | $1760 | | $1425 | | |

Comments:

Processing Computer: Remington 9300

MRPM Computer to be rented, usage rate assumed

* In addition to the cost of the automated intradepartmental system

** Included in System Analyst time

State: **Arkansas**

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | Manual | | Automated | | Manual | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 990 /mo. | 2 | 1980 | 2 | 1980 | .5 | 495 | .5 | 495 |
| Forms Designer | | /mo. | * | | | | | | | |
| System Analyst | | 990 /mo. | 1.5 | 1485 | 1 | 990 | .25 | 225 | .25 | 225 |
| Programmer | | 840 /mo. | 1 | 840 | | | .25 | 210 | | |
| Clerical | | 400 /mo. | | | 1 | 400 | | | 2 | 800 |
| Keypunch | | 2.30 /hr. | 144 | 330 | 4 | 10 | 140 | 330 | | |
| Computer | Process | 100 /hr. | 4 | 400 | | | 2 | 200 | | |
| | MRPM | 100 /hr. | .5 | 50 | .5 | 50 | .5 | 50 | .5 | 50 |
| TOTALS | | | | $4485 | | $3430 | | $1510 | | $1570 |

Comments:

Processing Computer: IBM 360/25

MRPM Computer : minimum 24K word storage required

* Included in System Analyst time

California
Colorado

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: **California**

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Modif of Existing Automated Proc | | | | Modif of Existing Automated Proc | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1060 /mo. | 4 | 4240 | | | 2 | 2120 | | |
| Forms Designer | | 700 /mo. | 1 | 700 | | | | | | |
| System Analyst | | 1060 /mo. | 1 | 1060 | | | .25 | 265 | | |
| Programmer | | 860 /mo. | 2 | 1720 | | | .25 | 215 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50 /hr. | 380 | 950 | | | 360 | 900 | | |
| Computer | Process | * /hr. | 4 | | | | 2 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $8670 | | | | $3500 | | |

Comments:

*No computer usage charge assumed

State: **Colorado**

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1030 /mo. | 2 | 2060 | | | 1 | 1030 | | |
| Forms Designer | | 700/mo. | .5 | 350 | | | | | | |
| System Analyst | | 1030/mo. | 2 | 2060 | | | .25 | 250 | | |
| Programmer | | 860/mo. | 1 | 860 | | | .25 | 215 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30/hr. | 200 | 460 | | | 180 | 435 | | |
| Computer | Process | * /hr. | 5 | | | | 3 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $5790 | | | | $1930 | | |

Comments:

* Computer: IBM 360/50
No computer usage charge assumed

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

| State: Connecticut | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | | Estimated Rate $ | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1060 /mo. | 5 | 5300 | | | 2 | 2120 | | |
| Forms Designer | | 700 /mo. | 1 | 700 | | | | | | |
| System Analyst | | 1060 /mo. | 3 | 3180 | | | .25 | 265 | | |
| Programmer | | 860 /mo. | 1.5 | 1290 | | | .25 | 215 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 5.00 /hr. | 180 | 900 | | | 170 | 850 | | |
| Computer* | Process | 100 /hr. | 6 | 600 | | | 4 | 400 | | |
| | MRPM | 150 /hr. | .5 | 75 | | | .5 | 75 | | |
| TOTALS | | | $12105 | | | | $5925 | | | |

Comments:

* Computer time must be leased

| State: Delaware | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | | Estimated Rate $ | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1040 /mo. | 2 | 2080 | | | 1 | 1040 | | |
| Forms Designer | | 700 /mo. | 1 | 700 | | | | | | |
| System Analyst | | 1040 /mo. | 2 | 2080 | | | .25 | 260 | | |
| Programmer | | 870 /mo. | 1.5 | 1305 | | | .25 | 220 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50 /hr. | 30 | 75 | | | 25 | 65 | | |
| Computer | Process | 0 /hr. | 4 | | | | 2 | | | |
| | MRPM* | 150 /hr. | .5 | 75 | | | .5 | 75 | | |
| TOTALS | | | $6315 | | | | $1660 | | | |

Comments:

Processing Computer is a 1401 Model G

* MRPM Computer to be rented

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: **Florida**

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Auto. Data Summary System | | | | Auto. Data Summary System | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1000 mo. | 2 | 2000 | | | 1 | 1000 | | |
| Forms Designer | | 700 /mo. | 1 | 700 | | | | | | |
| System Analyst | | 1000 /mo. | 1 | 1000 | | | | | | |
| Programmer | | 870 /mo. | 1 | 870 | | | .25 | 200 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30 /hr. | 90 | 210 | | | 80 | 185 | | |
| Computer | Process | * /hr. | 4 | | | | 2 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | $4780 | | | | $1385 | | | |

Comments:

Computer: IBM 360/40

* No computer usage charge assumed

State: **Georgia**

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1000 /mo. | 2 | 2000 | | | 1 | 1000 | | |
| Forms Designer | | 700 /mo. | .5 | 350 | | | | | | |
| System Analyst | | 1000 /mo. | .3 | 3000 | | | .25 | 250 | | |
| Programmer | | 870 /mo. | 1.5 | 1300 | | | .1 | 90 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30 /hr. | 180 | 415 | | | 160 | 365 | | |
| Computer | Process | 112 /hr. | 5 | 560 | | | 3 | 336 | | |
| | MRPM | 112 /hr. | .5 | 55 | | | .5 | 55 | | |
| TOTALS | | | $7680 | | | | $2096 | | | |

Comments:

Computer: IBM 360

# COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

| State: Hawaii | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Data Summary System | | Pupil Acctg System | | Data Summary System | | Pupil Acctg System | |
| Resource Category | | Estimated Rate $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1060 /mo. | 1 | 1060 | 2 | 2120 | .5 | 530 | 1 | 1060 |
| Forms Designer | | 800 /mo. | .75 | 600 | 1 | 800 | | | | |
| System Analyst | | 1060 /mo. | | | 1 | 1060 | | | .1 | 105 |
| Programmer | | 860 /mo. | | | 1 | 860 | | | .25 | 215 |
| Clerical | | 500 /mo. | .5 | 250 | | | .5 | 250 | | |
| Keypunch | | 2.50 /hr. | 4 | 10 | 100 | 250 | 4 | 10 | 20 | 50 |
| Computer | Process | * /hr. | 1 | | 4 | | .5 | | 1 | |
| | MRPM | * /hr. | .5 | | .5 | | .5 | | .5 | |
| TOTALS | | | | $1920 | | $4290 | | $790 | | $1430 |

**Comments:**

* No computer usage charge assumed

| State: Idaho | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| Resource Category | | Estimated Rate $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1030 mo. | 1.5 | 1030 | | | .25 | 260 | | |
| Forms Designer | | /mo. | ** | | | | | | | |
| System Analyst | | 1030/mo. | 1.5 | 1545 | | | .25 | 260 | | |
| Programmer | | 860/mo. | 1 | 860 | | | .25 | 215 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30 /hr. | 100 | 230 | | | 90 | 210 | | |
| Computer | Process | * /hr. | 4 | | | | 2 | | | |
| | MRPM | * /hr. | | | | | | | | |
| TOTALS | | | | $3665 | | | | $945 | | |

**Comments:**

* Computer: IBM 360/40, no usage charge assumed

** Included in System Analyst time

Hawaii
Idaho

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: Illinois

| Resource Category | | Estimated Rate $ | Implementation Automated Est Time | Implementation Automated Cost $ | Implementation Est Time | Implementation Cost $ | Maintenance Automated Est Time | Maintenance Automated Cost $ | Maintenance Est Time | Maintenance Cost $ |
|---|---|---|---|---|---|---|---|---|---|---|
| Spec. Ed. Staff | | 1040 mo. | 3 | 3120 | | | 1.5 | 1560 | | |
| Forms Designer | | 700/mo. | .5 | 350 | | | | | | |
| System Analyst | | 1040/mo. | 2.5 | 2590 | | | .25 | 260 | | |
| Programmer | | 850/mo. | 1 | 850 | | | .25 | 215 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50/hr. | 100 | 250 | | | 90 | 225 | | |
| Computer | Process | * /hr. | 7 | | | | 5 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $7160 | | | | $2260 | | |

Comments:

Computer: Honeywell 1250

* Computer usage charge not assumed

State: Indiana

| Resource Category | | Estimated Rate $ | Implementation Automated Est Time | Implementation Automated Cost $ | Implementation Est Time | Implementation Cost $ | Maintenance Automated Est Time | Maintenance Automated Cost $ | Maintenance Est Time | Maintenance Cost $ |
|---|---|---|---|---|---|---|---|---|---|---|
| Spec. Ed. Staff | | 1040 mo. | 2 | 2080 | | | .5 | 520 | | |
| Forms Designer | | /mo. | ** | | | | | | | |
| System Analyst | | 1040/mo. | 2 | 2080 | | | .25 | 260 | | |
| Programmer | | 850/mo. | 1 | 850 | | | .25 | 210 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50/hr. | 200 | 500 | | | 180 | 450 | | |
| Computer | Process | * /hr. | 6 | | | | 4 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $5510 | | | | $1440 | | |

Comments:

*Computer - IBM360/50 --no computer usage cost assumed

**Included in System Analyst time

Illinois
Indiana

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: Iowa

| Resource Category | | Estimated Rate $ | Implementation Automated Est Time | Implementation Automated Cost $ | Implementation Est Time | Implementation Cost $ | Maintenance Automated Est Time | Maintenance Automated Cost $ | Maintenance Est Time | Maintenance Cost $ |
|---|---|---|---|---|---|---|---|---|---|---|
| Spec. Ed. Staff | | 1020 mo. | 3 | 3060 | | | 1.5 | 1530 | | |
| Forms Designer | | 700/mo. | .5 | 350 | | | | | | |
| System Analyst | | 1020/mo. | 2 | 2040 | | | .25 | 255 | | |
| Programmer | | 820/mo. | 1 | 820 | | | .25 | 205 | | |
| Clerical | | 500/mo. | .5 | 250 | | | .5 | 250 | | |
| Keypunch | | 2.20/hr. | 140 | 310 | | | 130 | 290 | | |
| Computer | Process | * /hr. | 5 | | | | 4 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $6830 | | | | $2530 | | |

Comments:

Computers: IBM 1401
IBM 360/40

*Computer usage charge not assumed

State: Kansas

| Resource Category | | Estimated Rate $ | Implementation Fully Automated Est Time | Implementation Fully Automated Cost $ | Implementation Partially Automated Est Time | Implementation Partially Automated Cost $ | Maintenance Fully Automated Est Time | Maintenance Fully Automated Cost $ | Maintenance Partially Automated Est Time | Maintenance Partially Automated Cost $ |
|---|---|---|---|---|---|---|---|---|---|---|
| Spec. Ed. Staff | | 1020 mo. | 2 | 2040 | 2 | 2040 | 1 | 1020 | 1 | 1020 |
| Forms Designer | | 700/mo. | 1 | 700 | 1 | 700 | | | | |
| System Analyst | | 1020/mo. | 2.5 | 2550 | 1 | 1020 | .25 | 255 | .1 | 100 |
| Programmer | | 820/mo. | 1 | 820 | .5 | 410 | .25 | 205 | .1 | 80 |
| Clerical | | 500/mo. | | | 1 | 500 | | | 1 | 500 |
| Keypunch | | 2.20/hr. | 110 | 240 | 30 | 65 | 100 | 220 | 30 | 65 |
| Computer | Process | 77/hr. | 5 | 385 | 3 | 230 | 4 | 310 | 2 | 155 |
| | MRPM | 77/hr. | .5 | 40 | .5 | 40 | .5 | 40 | .5 | 40 |
| TOTALS | | | | $6775 | | $5005 | | $2050 | | $1960 |

Comments:

Computer: RCA Spectra 70

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: Kentucky

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Data Summary Sys. | | | | Data Summary Sys. | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1050 mo. | 4 | 4200 | | | 2 | 2100 | | |
| Forms Designer | | 700/mo. | 1.25 | 875 | | | | | | |
| System Analyst | | 1050/mo. | .5 | 525 | | | .1 | 105 | | |
| Programmer | | 800/mo. | 1 | 800 | | | .25 | 200 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.20/hr. | 240 | 530 | | | 230 | 510 | | |
| Computer | Process | * /hr. | 3 | | | | 2 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $6055 | | | | $2915 | | |

Comments:

* No computer usage charge assumed

State: Louisiana

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 990 mo. | 3 | 2970 | | | 1 | 990 | | |
| Forms Designer | | 700/mo. | 1 | 700 | | | | | | |
| System Analyst | | 990/mo. | 3 | 2970 | | | .25 | 250 | | |
| Programmer | | 840/mo. | 1 | 840 | | | .25 | 210 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30/hr. | 80 | 185 | | | 70 | 160 | | |
| Computer | Process | * /hr. | 3 | | | | 2 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $7665 | | | | $1610 | | |

Comments:

Computer must be purchased or leased

* Does not include computer usage cost estimate

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

| State: Maine | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| Resource Category | | Estimated Rate $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1050 mo. | 1 | 1050 | | | .25 | 260 | | |
| Forms Designer | | /mo. | ** | | | | | | | |
| System Analyst | | 1050/mo. | 1.5 | 1575 | | | .25 | 260 | | |
| Programmer | | 850/mo. | .5 | 425 | | | .25 | 215 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30/hr. | 50 | 115 | | | 40 | 90 | | |
| Computer | Process | 80/hr. | 4 | 320 | | | 2 | 160 | | |
| | MRPM | * /hr. | | | | | | | | |
| TOTALS | | | | $3485 | | | | $985 | | |

Comments:

Computer: IBM 360/40

* MRPM Implementation not recommended

** Included in Systems Design Time

| State: Maryland | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated Intradepartmental | | Automated* Interdepartmental | | Automated (both) | | | |
| Resource Category | | Estimated Rate $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1040 mo. | 3 | 3120 | .5 | 520 | .5 | 520 | | |
| Forms Designer | | /mo. | ** | | | | | | | |
| System Analyst | | 1040/mo. | 2 | 2080 | .5 | 520 | .25 | 260 | | |
| Programmer | | 870/mo. | 1.5 | 1300 | .25 | 220 | .25 | 220 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50/hr. | 40 | 100 | | | 30 | 75 | | |
| Computer | Process | 20/hr. | 4 | 80 | | | 2 | 40 | | |
| | MRPM | 60/hr. | .5 | 30 | | | .5 | 30 | | |
| TOTALS | | | | $6710 | | $1260 | | $1145 | | |

Comments:

Process Computer-IBM 360/20
MRPM Computer-IBM 1460

* In addition to Intradepartmental system

** Included in System Analyst time

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: Massachusetts

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated Intradepartmental | | Automated * Interdepartmental | | Automated (both) | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1060 mo. | 3 | 3180 | 2 | 2120 | .5 | 530 | | |
| Forms Designer | | /mo. | ** | | | | | | | |
| System Analyst | | 1060/mo. | 4 | 4240 | 1.5 | 1590 | .5 | 530 | | |
| Programmer | | 860/mo. | 2 | 1720 | .5 | 430 | .5 | 430 | | |
| Clerical | | 500/mo. | 1 | 500 | | | .5 | 250 | | |
| Keypunch | | 2.50/hr. | 400 | 1000 | | | 400 | 1000 | | |
| Computer | Process | 50/hr. | 4 | 200 | | | 2 | 100 | | |
| | MRPM | 100/hr. | .5 | 50 | | | .5 | 50 | | |
| TOTALS | | | | $10890 | | $4140 | | $2890 | | |

Comments:

Process Computer-Honeywell 200

MRPM computer to be rented

* This is in addition to the cost of the intradepartmental system

** Included in System Analyst time

State: Michigan

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated Intradepartmental | | Automated * Interdepartmental | | Automated (Both) | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1020 /mo. | 1 | 1020 | .5 | 510 | .5 | 510 | | |
| Forms Designer | | /mo. | ** | | | | | | | |
| System Analyst | | 1020 /mo. | 2 | 2040 | .5 | 510 | .5 | 510 | | |
| Programmer | | 850 /mo. | 1 | 850 | .5 | 425 | .25 | 210 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50 /hr. | 100 | 250 | | | 100 | 250 | | |
| Computer | Process | 100 /hr. | 2 | 200 | 1 | 100 | 2 | 200 | | |
| | MRPM | 100 /hr. | .5 | 50 | | | .5 | 50 | | |
| TOTALS | | | | $4410 | | $1545 | | $1730 | | |

Comments:

* This is in addition to the cost of the Intradepartmental System

**Included in System Analyst time

Computer: CDC 6600

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: Minnesota

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1020 /mo. | 2 | 2040 | | | 1 | 1020 | | |
| Forms Designer | | 700 /mo. | .5 | 350 | | | | | | |
| System Analyst | | 1020 /mo. | 2 | 2040 | | | .25 | 255 | | |
| Programmer | | 820 /mo. | 1 | 820 | | | .1 | 80 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.20 /hr. | 410 | 900 | | | 400 | 880 | | |
| Computer | Process | * /hr. | 6 | | | | 4 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | $6150 | | | | $2235 | | | |

Comments:

* No computer usage cost assumed

State: Mississippi

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1050 /mo. | 3 | 3150 | | | 1 | 1050 | | |
| Forms Designer | | 700 /mo. | 1 | 700 | | | | | | |
| System Analyst | | 1050 /mo. | 3 | 3150 | | | .25 | 260 | | |
| Programmer | | 800 /mo. | 1 | 800 | | | .1 | 80 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | /hr. | 150 | * | | | 140 | * | | |
| Computer | Process | 116.32/hr. | 3 | 349 | | | 2 | 233 | | |
| | MRPM | 116.32/hr. | .5 | 59 | | | .5 | 59 | | |
| TOTALS | | | $8208 | | | | $1682 | | | |

Comments:

* Keypunching cost is included in computer rental cost.

Computer: Honeywell 200

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## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

| State: Missouri | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | | Estimated Rate $ | Automated Roster System | | Tabulation System | | Automated Roster System | | Tabulation System | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1020 /mo. | 3 | 3060 | 2 | 2040 | 1 | 1020 | 1 | 1020 |
| Forms Designer | | 700 /mo. | .25 | 175 | .5 | 350 | | | | |
| System Analyst | | 1020 /mo. | 3 | 3060 | 1.5 | 1530 | .5 | 510 | .25 | 255 |
| Programmer | | 820 /mo. | 1.5 | 1250 | (1) | (820) | .25 | 205 | (.1) | (80) |
| Clerical | | 500 /mo. | | | 3 | 1500 | | | 3 | 1500 |
| Keypunch | | 2.20 /hr. | 180 | 400 | (70) | (155) | 20 | 45 | (60) | (130) |
| Computer | Process | 0 /hr. | 10 | | (4) | | 4 | | (3) | |
| | MRPM* | 150 /hr. | .5 | 75 | .5 | 75 | .5 | 75 | .5 | 75 |
| TOTALS | | | | $8020 | Manual<br>Auto. | 5495<br>(6470) | | $1855 | Manual<br>Auto. | 2850<br>(3060) |

Comments:

*Computer Time will have to be leased

Computer: IBM 360/30

| State: Montana | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | | Estimated Rate $ | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1030 /mo. | 1 | 1030 | | | .5 | 515 | | |
| Forms Designer | | /mo. | * | | | | | | | |
| System Analyst | | 1030 /mo. | 1.5 | 1545 | | | .25 | 260 | | |
| Programmer | | 860 /mo. | .5 | 430 | | | .25 | 215 | | |
| Clerical | | 400 /mo. | .5 | 200 | | | .5 | 200 | | |
| Keypunch | | 2.30 /hr. | 100 | 230 | | | 100 | 230 | | |
| Computer | Process | 50 /hr. | 4 | 100 | | | 2 | 100 | | |
| | MRPM** | /hr. | | | | | | | | |
| TOTALS | | | | $3535 | | | | $1520 | | |

Comments:

* Included in System Analyst time

** MRPM not recommended for near term implementation computer is a Honeywell 200

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: Nebraska

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | Manual | | Automated | | Manual | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1020 /mo. | 2 | 2040 | 2 | 2040 | 1 | 1020 | 1 | 1020 |
| Forms Designer | | 700 /mo. | 1 | 700 | 1 | 700 | | | | |
| System Analyst | | 1020 /mo. | 2 | 2040 | 1 | 1020 | .25 | 255 | .1 | 100 |
| Programmer | | 820 /mo. | 1 | 820 | | | .1 | 80 | | |
| Clerical | | 500 /mo. | | | 2 | 1000 | | | 2 | 1000 |
| Keypunch | | 2.20 /hr. | 100 | 220 | | | 90 | 200 | | |
| Computer* | Process | 150 /hr. | 4 | 600 | | | 3 | 450 | | |
| | MRPM | 150 /hr. | .5 | 75 | .5 | 75 | .5 | 75 | .5 | 75 |
| TOTALS | | | | $6495 | | $4835 | | $2080 | | $2195 |

Comments:
* Time leased from Department of Administrative Services; rate assumed

State: Nevada

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1030 /mo. | 4 | 4120 | | | 1 | 1030 | | |
| Forms Designer | | 700 /mo. | 1 | 700 | | | | | | |
| System Analyst | | 1030 /mo. | 3 | 3090 | | | .25 | 260 | | |
| Programmer | | 860 /mo. | 1 | 860 | | | .1 | 90 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30 /hr. | 30 | 70 | | | 22 | 50 | | |
| Computer | Process | 65 /hr. | 2 | 130 | | | 1 | 65 | | |
| | MRPM | 65 /hr. | .5 | 35 | | | .5 | 35 | | |
| TOTALS | | | | $9005 | | | | $1530 | | |

Comments:
Computer: IBM 360/50

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: **New Hampshire**

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated EDP | | Automated EAM | | Automated EDP | | Automated EAM | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1050 /mo. | 2 | 2100 | 1 | 1050 | 1 | 1050 | .5 | 525 |
| Forms Designer | | 700 /mo. | .5 | 350 | | | | | | |
| System Analyst | | 1050 /mo. | 2 | 2100 | 1 | 1050 | .25 | 260 | .25 | 260 |
| Programmer | | 850 /mo. | .5 | 425 | | | | | | |
| Clerical | | 500 /mo. | | | .5 | 250 | | | .5 | 250 |
| Keypunch | | 2.30 /hr. | 40 | 90 | 40 | 90 | 30 | 70 | 40 | 90 |
| Computer | Process* | ** /hr. | 3 | | | | 2 | | | |
| | MRPM | ** /hr. | .5 | | .5 | | .5 | | .5 | |
| TOTALS | | | | $5065 | | $2440 | | $1380 | | $1125 |

Comments:

* Currently using EAM equipment, EDP computer charge not yet established

** No computer usage charge assumed

State: **New Jersey**

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1060 /mo. | 4 | 4240 | | | 2 | 2120 | | |
| Forms Designer | | 700 /mo. | 1 | 700 | | | | | | |
| System Analyst | | 1060 /mo. | 4 | 4240 | | | .25 | 265 | | |
| Programmer | | 870 /mo. | 1.5 | 1300 | | | .1 | 90 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50 /hr. | 720 | 1800 | | | 700 | 1750 | | |
| Computer* | Process | ** /hr. | 6 | | | | 4 | | | |
| | MRPM | ** /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | **$12280 | | | | **$4225 | | |

Comments:

Estimate is independent of the Educational Management Information System under development

* Computer charge unknown; computers are 360/models 40 and 50

** Does not include a charge for computer usage

# COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: New Mexico

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Auto. Data Summ. Syst. | | | | Auto. Data Summ. Syst. | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1030 /mo. | 3 | 3090 | | | 1 | 1030 | | |
| Forms Designer | | 700 /mo. | 1 | 700 | | | | | | |
| System Analyst | | 1030 /mo. | .5 | 515 | | | | | | |
| Programmer | | 860 /mo. | .5 | 430 | | | .1 | 90 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30 /hr. | 90 | 210 | | | 80 | 185 | | |
| Computer | Process | 0 /hr. | 5 | | | | 4 | | | |
| | MRPM | 90 /hr. | .5 | 45 | | | .5 | 45 | | |
| TOTALS | | | | $4990 | | | | $1350 | | |

Comments:
Computers: IBM 1401 H for processing; IBM 360/50 for MRPM

State: New York

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1060 /mo. | 2 | 2120 | | | 1 | 1060 | | |
| Forms Designer | | 700 /mo. | .5 | 350 | | | | | | |
| System Analyst | | 1060 /mo. | 2 | 2120 | | | .25 | 265 | | |
| Programmer | | 870 /mo. | 1 | 870 | | | .1 | 90 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch* | | 2.50 /hr. | 100 | 250 | | | 90 | 225 | | |
| Computer | Process | * /hr. | 15 | | | | 10 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $5710 | | | | $1630 | | |

Comments:
*No computer usage charge assumed

** Most input documents are in machine readable formats, i.e., mark sense

# COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: North Carolina

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated EAM | | | | Automated EAM | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1000 /mo. | 2 | 2000 | | | 1 | 1000 | | |
| Forms Designer | | 700 /mo. | .5 | 350 | | | | | | |
| System Analyst | | 1000 /mo. | 2 | 2000 | | | .25 | 250 | | |
| Programmer | | 870 /mo. | .5 | 435 | | | | | | |
| Clerical | | 400 /mo. | .5 | 200 | | | .5 | 200 | | |
| Keypunch | | 2.30 /hr. | 125 | 290 | | | 120 | 275 | | |
| Computer | Process | * /hr. | 6 | | | | 4 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $5275 | | | | $1725 | | |

Comments:
Data Processing Equipment:
IBM 407

MRPM computer capacity will have to be obtained elsewhere

* No computer charge assumed

State: North Dakota

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | Manual | | Automated | | Manual | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1020 /mo. | 2 | 2040 | 1 | 1020 | .25 | 255 | .5 | 510 |
| Forms Designer | | /mo. | * | | * | | | | | |
| System Analyst | | 1020 /mo. | 3 | 3060 | 3 | 3060 | .25 | 255 | | |
| Programmer | | 820 /mo. | 1 | 820 | [1] | [820] | .25 | 205 | | |
| Clerical | | 400 /mo. | .5 | 200 | 1.5 | 600 | .5 | 200 | 1.5<br>[-1.5] | 600<br>[-600] |
| Keypunch | | 2.20 /hr. | 30 | 65 | 25 | 55 | 25 | 55 | 25 | 55 |
| Computer | Process | * /hr. | 4 | | | | 2 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $6185 | Man. 4735<br>[5555] | | | $970 | Man. $1165<br>[565] | |

Comments:

Computer: RCA Spectra 45

* Included in Systems Analyst time

** No computer usage charge assumed

# COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

| State: Ohio | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | | Estimated Rate $ | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1040 /mo. | 3 | 3120 | | | 1 | 1040 | | |
| Forms Designer | | 700 /mo. | 1 | 700 | | | | | | |
| System Analyst | | 1040 /mo. | 4 | 4160 | | | .25 | 260 | | |
| Programmer | | 850 /mo. | 1.5 | 1275 | | | .25 | 210 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50 /hr. | 650 | 1625 | | | 640 | 1600 | | |
| Computer | Process | * /hr. | 6 | | | | 4 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | $10880 | | | | $3110 | | | |

Comments:

Computer - Honeywell 200 (65K)

* No computer usage charges have been assumed

| State: Oklahoma | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | | Estimated Rate $ | Auto. Data Summ. Syst. | | Mod. Pupil Acct. Syst. | | Auto. Data Summ. Syst | | Mod. Pupil Acct. Syst. | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 990 /mo. | 3 | 2970 | 4 | 3960 | 1 | 990 | 1 | 990 |
| Forms Designer | | 700 /mo. | .75 | 525 | 1 | 700 | | | | |
| System Analyst | | 990 /mo. | .5 | 495 | 2 | 1980 | | | .1 | 100 |
| Programmer | | 840 /mo. | .5 | 420 | 1.5 | 1260 | .1 | 85 | .25 | 210 |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30 /hr. | 200 | 460 | 350 | 805 | 190 | 440 | 60 | 140 |
| Computer | Process | * /hr. | 3 | | 10 | | 2 | | 4 | |
| | MRPM | * /hr. | .5 | | .5 | | .5 | | .5 | |
| TOTALS | | | $4870 | | $8705 | | $1515 | | $1440 | |

Comments:

Computer: RCA Spectra 70/35

* No computer use charge assumed

Ohio
Oklahoma

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

| State: Oregon | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | | Estimated Rate $ | Mod. Pupil Acct. Syst. | | | | Mod. Pupil Acct. Syst. | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1060 /mo. | 4 | 4240 | | | 1 | 1060 | | |
| Forms Designer | | 700 /mo. | 1 | 700 | | | | | | |
| System Analyst | | 1060 /mo. | 2 | 2120 | | | .1 | 100 | | |
| Programmer | | 860 /mo. | 1.5 | 1290 | | | .25 | 215 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50 /hr. | 200 | 500 | | | 50 | 125 | | |
| Computer | Process | 75 /hr. | 10 | 750 | | | 4 | 325 | | |
| | MRPM | 75 /hr. | .5 | 40 | | | .5 | 40 | | |
| TOTALS | | | $9640 | | | | $1865 | | | |

Comments:

Computer: IBM 360/40

| State: Pennsylvania | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | | Estimated Rate $ | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1060 mo. | 2.5 | 2650 | | | .5 | 530 | | |
| Forms Designer | | 700 /mo. | 1 | 700 | | | | | | |
| System Analyst | | 1060 /mo. | 2 | 2120 | | | .25 | 285 | | |
| Programmer | | 870 /mo. | 1 | 870 | | | .25 | 220 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50/hr. | 200 | 500 | | | 190 | 475 | | |
| Computer | Process | * /hr. | 6 | | | | 4 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | $6840 | | | | $1510 | | | |

Comments:

* No computer usage charge assumed

Oregon
Pennsylvania

# COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: Rhode Island

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1060 mo. | 1 | 1060 | | | .5 | 530 | | |
| Forms Designer | | /mo. | * | | | | | | | |
| System Analyst | | 1060 /mo. | 2 | 2120 | | | .5 | 530 | | |
| Programmer | | 860 /mo. | 2 | 1720 | | | .25 | 215 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50/hr. | 35 | 90 | | | 30 | 75 | | |
| Computer** | Process | 100 /hr. | 4 | 400 | | | 1 | 100 | | |
| | MRPM | 100 /hr. | .5 | 50 | | | .5 | 50 | | |
| TOTALS | | | | $5440 | | | | $1500 | | |

Comments:

* Included in System Analyst time

** Rented computer

State: South Carolina

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1000 mo. | 2.5 | 2500 | | | .5 | 500 | | |
| Forms Designer | | 700 /mo. | .5 | 350 | | | | | | |
| System Analyst | | 1000 /mo. | 2.5 | 2500 | | | .25 | 250 | | |
| Programmer | | 870 /mo. | 1 | 870 | | | .25 | 220 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30/hr. | 85 | 200 | | | 80 | 185 | | |
| Computer | Process | * /hr. | 4 | | | | 2 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $6420 | | | | $1155 | | |

Comments:

Computer IBM 360/40

* No computer usage charge assumed

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: South Dakota

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1020 mo. | 2 | 2040 | | | .25 | 255 | | |
| Forms Designer | | /mo. | * | | | | | | | |
| System Analyst | | 1020 /mo. | 3 | 3060 | | | .25 | 255 | | |
| Programmer | | 820 /mo. | 1 | 820 | | | .5 | 205 | | |
| Clerical | | 400 /mo. | .5 | 200 | | | .5 | 200 | | |
| Keypunch | | 2.20/hr. | 20 | 45 | | | 15 | 35 | | |
| Computer | Process | ** /hr. | 4 | | | | 2 | | | |
| | MRPM | ** /hr. | .5 | | | | .5 | | | |
| TOTALS | | | $6165 | | | | $950 | | | |

Comments:

Computer IBM 360/40

* Included in System Analyst time

** No computer usage charges assumed.

State: Tennessee

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated Intradepartmental | | Automated* Interdepartmental | | Automated (both) | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1050 mo. | 2 | 2100 | 1 | 1050 | .5 | 525 | | |
| Forms Designer | | /mo. | ** | | | | | | | |
| System Analyst | | 1050 /mo. | 3 | 3150 | 1 | 1050 | .5 | 260 | | |
| Programmer | | 800 /mo. | 1 | 800 | .25 | 200 | .25 | 200 | | |
| Clerical | | 400 /mo. | 1 | 400 | | | .5 | 200 | | |
| Keypunch | | 2.20/hr. | 100 | 220 | | | 100 | 220 | | |
| Computer | Process | *** /hr. | 4 | | | | 4 | | | |
| | MRPM | *** /hr. | .5 | | | | .5 | | | |
| TOTALS | | | $6670 | | $2300 | | $1405 | | | |

Comments:

* This is in addition to the cost of the intradepartmental system.

** Included in System Analyst time

*** No computer usage charge assumed

# COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: Texas

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated Data Summary System | | Modified Pupil Accounting System | | Automated Data Summary System | | Modified Pupil Accounting System | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1050 mo. | 3 | 3150 | 4 | 4200 | 1 | 1050 | 1 | 1050 |
| Forms Designer | | 700 /mo. | 1 | 700 | 1 | 700 | | | | |
| System Analyst | | 1050 /mo. | 1 | 1050 | 2 | 2100 | | | .1 | 100 |
| Programmer | | 860 /mo. | 1 | 860 | 1.5 | 1290 | .1 | 80 | .25 | 200 |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30/hr. | 1400 | 3220 | 3400 | 7820 | 1390 | 3200 | 680 | 1565 |
| Computer | Process | * /hr. | 10 | | 20 | | 8 | | 8 | |
| | MRPM | 250/hr. | .5 | 125 | .5 | 125 | .5 | 125 | .5 | 125 |
| TOTALS | | | | $9105 | | $16235 | | $4455 | | $3040 |

Comments:

Computers: UNIVAC 1050 for processing; IBM 360/50 for MRPM

* No computer usage charges assumed

State: Utah

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1030 mo. | 2 | 2060 | | | .5 | 515 | | |
| Forms Designer | | /mo. | * | | | | | | | |
| System Analyst | | 1030 /mo. | 2 | 2060 | | | .25 | 260 | | |
| Programmer | | 860 /mo. | 1 | 860 | | | .25 | 215 | | |
| Clerical | | 400 /mo. | 1 | 400 | | | .5 | 200 | | |
| Keypunch | | 2.30/hr. | 40 | 90 | | | 40 | 90 | | |
| Computer | Process | 100 /hr. | 4 | 400 | | | 4 | 400 | | |
| | MRPM | 100 /hr. | .5 | 50 | | | .5 | 50 | | |
| TOTALS | | | | $5960 | | | | $1730 | | |

Comments:

* Included in System Analyst time

Computer: RCA Spectra 70/45

Texas
Utah

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

| State: Vermont | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | | Estimated Rate $ | Automated | | Manual | | Automated | | Manual | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1050 mo. | 2 | 2100 | 1 | 1050 | .5 | 525 | .5 | 525 |
| Forms Designer | | /mo. | * | | | | | | | |
| System Analyst | | 1050/mo. | 3.5 | 3675 | 2 | 2100 | .5 | 525 | .25 | 260 |
| Programmer | | 850/mo. | 1 | 850 | | | .25 | 210 | | |
| Clerical | | 400/mo. | | | 1 | 400 | | | 1 | 400 |
| Keypunch | | 2.30/hr. | 30 | 70 | | | 25 | 65 | | |
| Computer | Process | 85/hr. | 4 | 340 | | | 2 | | | |
| | MRPM | 85/hr. | .5 | 45 | .5 | 45 | .5 | 45 | .5 | 45 |
| TOTALS | | | | $7080 | | $3595 | | $1370 | | $1230 |

Comments:

* Included in Systems Analyst time

| State: Virginia | | | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | | Estimated Rate $ | Auto. Data* Summary System | | Auto. Data** Summary System Input | | Auto. Data* Summary System | | Auto. Data** Summary System Input | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1000 mo. | 2 | 2000 | 3 | 3000 | 1 | 1000 | 1 | 1000 |
| Forms Designer | | 700/mo. | 1 | 700 | 1 | 700 | | | | |
| System Analyst | | 1000/mo. | .5 | 500 | .5 | 500 | | | | |
| Programmer | | 870/mo. | .5 | 435 | .5 | 435 | .1 | 85 | .1 | 85 |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30/hr. | 140 | 320 | 150 | 345 | 130 | 300 | 140 | 320 |
| Computer | Process | *** /hr. | 3 | | 5 | | 2 | | 4 | |
| | MRPM | 150/hr. | .5 | 75 | .5 | 75 | .5 | 75 | .5 | 75 |
| TOTALS | | | | $4035 | | $5050 | | $1460 | | $1480 |

Comments:

Computers: IBM 360/Model 25; undetermined for MRPM

* Input: Division summaries

** Input: Teacher/class reports.

*** No computer usage charge assumed for processing values shown for MRPM represent estimated average rental cost

Vermont
Virginia

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: Washington

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance ** | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1060 mo. | .5 | 530 | | | ** | | | |
| Forms Designer | | /mo. | * | | | | | | | |
| System Analyst | | 1060/mo. | 1 | 1060 | | | ** | | | |
| Programmer | | 860/mo. | 1 | 860 | | | ** | | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50/hr. | 80 | 200 | | | 80 | 200 | | |
| Computer | Process | 100/hr. | 2 | 200 | | | ** | ** | | |
| | MRPM | 100/hr. | .5 | 50 | | | .5 | 50 | | |
| TOTALS | | | | $2900 | | | | $250 | | |

Comments:

* Included in System Analyst time

** An automated system is already in effect. No additional cost anticipated

State: West Virginia

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1000 mo. | 2 | 2000 | | | .5 | 500 | | |
| Forms Designer | | 700/mo. | .5 | 350 | | | | | | |
| System Analyst | | 1000/mo. | 4 | 4000 | | | .25 | 250 | | |
| Programmer | | 870/mo. | 1 | 870 | | | .25 | 220 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30/hr. | 45 | 105 | | | 40 | 90 | | |
| Computer | Process | * /hr. | 4 | | | | 2. | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $7325 | | | | $1060 | | |

Comments:

Process Computer —
Burroughs 3000

MRPM Computer — IBM 360/
50 or IBM 7040

* No computer usage charge assumed

## COST ESTIMATE FOR SPECIAL EDUCATION DATA DEVELOPMENT AND MRPM APPLICATION AT STATE LEVEL

State: Wisconsin

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1040 mo. | 2.5 | 2600 | | | 1 | 1040 | | |
| Forms Designer | | /mo. | * | | | | | | | |
| System Analyst | | 1040/mo. | 2.5 | 2600 | | | .25 | 260 | | |
| Programmer | | 850/mo. | 1 | 850 | | | .25 | 210 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.50/hr. | 40 | 100 | | | 36 | 90 | | |
| Computer | Process | ** /hr. | 6 | | | | 4 | | | |
| | MRPM | ** /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $6150 | | | | $1600 | | |

Comments:

* Included in Systems Analysts time

Processing Computer — IBM 360/30

MRPM Computer capability (32K word storage) required

** No computer usage charge assumed

State: Wyoming

| Resource Category | | Estimated Rate $ | Implementation | | | | Maintenance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Automated | | | | Automated | | | |
| | | | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ | Est Time | Cost $ |
| Spec. Ed. Staff | | 1030 mo. | 2.5 | 2575 | | | 1 | 1030 | | |
| Forms Designer | | 700/mo. | .5 | 350 | | | | | | |
| System Analyst | | 1030/mo. | 2 | 2060 | | | .25 | 260 | | |
| Programmer | | 860/mo. | .5 | 430 | | | .25 | 215 | | |
| Clerical | | /mo. | | | | | | | | |
| Keypunch | | 2.30/hr. | 25 | 60 | | | 20 | 45 | | |
| Computer | Process | * /hr. | 4 | | | | 2 | | | |
| | MRPM | * /hr. | .5 | | | | .5 | | | |
| TOTALS | | | | $5475 | | | | $1550 | | |

Comments:

Process Computer: IBM 360/30

MRPM computer requires 32K word storage

* No computer usage charge assumed